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BARRICK MERCUR GOLD MINE  
1995 RESERVATION CANYON  
TAILING IMPOUNDMENT  
EXPANSION PROJECT

APRIL 1995





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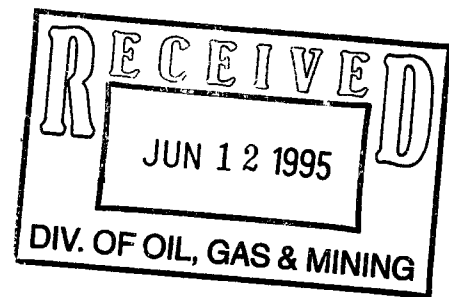
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**BARRICK MERCUR GOLD MINE**  
**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**  
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**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**I. INSTRUCTIONS AND INFORMATION FOR BIDDERS**

**FOR**

**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

I. INSTRUCTIONS AND INFORMATION  
FOR BIDDERS

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I. INSTRUCTIONS AND INFORMATION  
FOR BIDDERS

1.0 BIDDER'S RESPONSIBILITY UPON RECEIPT OF DOCUMENTS

- 1.1 The letter of Invitation to Bid will list the Contract Documents enclosed therewith. It shall be the responsibility of the Bidder to verify immediately upon receipt of the Invitation to Bid that the Contract Documents listed therein have, in fact, been furnished as represented and carry the revision number or letter shown in the referring document.
- 1.2 If it is discovered by the Bidder that a document or an attachment thereto has not been enclosed or has not been furnished in the same revision form as represented by the Invitation to Bid or the referring Contract Document, the Bidder must immediately telephone and notify the Owner in writing.
- 1.3 Promptly upon determination of receipt of all enclosures, the Bidder must sign and return the acknowledgment copy of the letter of Invitation to Bid.

2.0 ADDENDA

- 2.1 The Owner shall have the right to amend the Contract Documents issued with the Invitation to Bid at any time prior to the closing time set therein for receipt of bids. Such revisions, if any, shall be made by an addendum issued in identical form to each bidder.

3.0 PROPOSALS

- 3.1 Proposals must be submitted by the Bidder on the Form of Proposal furnished with the Invitation to Bid. Proposals shall bear the official company name and business address to be used in execution of the Contract Agreement and must be signed by a person duly authorized to bind the corporation, partnership, or other entity as shown thereon under "Company Legal Status." The original and all copies of the Proposal must be identically signed.
- 3.2 The Owner shall have the right to reject any or all Proposals, including those which are incomplete, obscure, irregular, have errors or omissions, or, for technical or commercial reasons, are nonresponsive to the intent of the Contract Documents.
- 3.3 Proposals shall be submitted in the number of copies requested in the Invitation to Bid and shall be addressed as directed therein. Proposals received will be privately opened in the presence of representatives of the Owner. The Owner shall have the right to return to the Bidder unopened any bid received after the date specified in the Invitation to Bid.

4.0 SITE INSPECTION

- 4.1 The Bidder shall be responsible for visiting the Site and fully informing itself of all existing and potential conditions which may affect the costs of mobilization of materials and supplies and of performance of the Work.
- 4.2 Prior to the Bid closing date, the Owner will conduct a pre-Bid meeting and site investigation for all of the Bidders. At this meeting, all Site locations where the Work is to be performed will be visited and questions regarding the Contract Documents will



## I. INSTRUCTIONS AND INFORMATION FOR BIDDERS

be clarified. Each Bidder is responsible to attend this meeting, and to familiarize itself with all of the existing and potential conditions which may affect the costs of mobilization of materials and supplies and of performance of the Work.

- 4.3 Prior to the pre-Bid meeting and the Site investigation, the Bidder should complete a review of the General Terms and Conditions and other Contract documentation, with particular attention to safety regulations, insurance requirements, and scheduled performance of the Work.
- 4.4 The purpose of the pre-Bid meeting and the Site investigation is to provide an opportunity for all Bidders to receive general information concerning the Project on an equitable basis. However, the Bidder will make its proposal based on its own independent evaluation, without relying on any representation or promise of the Owner, except those expressly contained herein.
- 4.5 Arrangements for additional Site visits after the scheduled meeting may be made through the Owner as indicated in the Invitation to Bid.

### 5.0 BIDDER'S QUALIFICATIONS

- 5.1 The Owner shall have the right to request from the Bidder, at any time prior to the award of the Contract, any information considered necessary to further assure the Owner that the Bidder is adequately prepared and able to fulfill the Contract. Such information may include past performance records, lists of available key personnel, an inventory of construction equipment, descriptions of completed contracts, contracts to be performed simultaneously with this Contract, financial statements, or any other data pertinent to the selection and approval of the Contractor to perform the Work.
- 5.2 The successful Bidder must, prior to award of the Contract, be duly qualified as required by government authorities to do business in the State of Utah and the County of Tooele.
- 5.3 The appointment of a locally established legal representative, if required by the Owner, must thereafter be continually maintained during the term of the Contract. The Owner shall be informed of the name, address, and authority of such representative prior to the award of the Contract.

### 6.0 SELECTION OF THE CONTRACTOR

- 6.1 As soon as possible after the closing date set to receive bids, the Owner will select the Contractor on the basis of price, organization, qualification, construction capabilities, completion dependability, experience, warranty terms, and such other factors as the Owner, in its judgment, considers to be in the best interest of the Project.
- 6.2 A low price will always be a major consideration in the evaluation of bids received; however, price will not be the sole deciding factor in the selection of the Contractor to perform the Work.



I. INSTRUCTIONS AND INFORMATION  
FOR BIDDERS

7.0 PERFORMANCE GUARANTEE

- 7.1 The Owner may, at any time prior to the award of the Contract, request a performance and material payment bond; in which case, the award of the Contract will be contingent upon the Bidder's ability to obtain the same.
- 7.2 The cost of the performance and material payment bond, if required, will be borne by the Owner as an added expense to the Contract.

8.0 SITE LOCATION

The Project is located near Mercur Canyon, and is reached by access road off State Highway 73 approximately 25 miles south of Tooele, Utah (50 miles southwest of Salt Lake City) as shown on the attached area map.

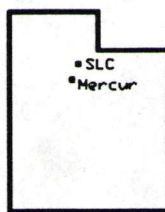
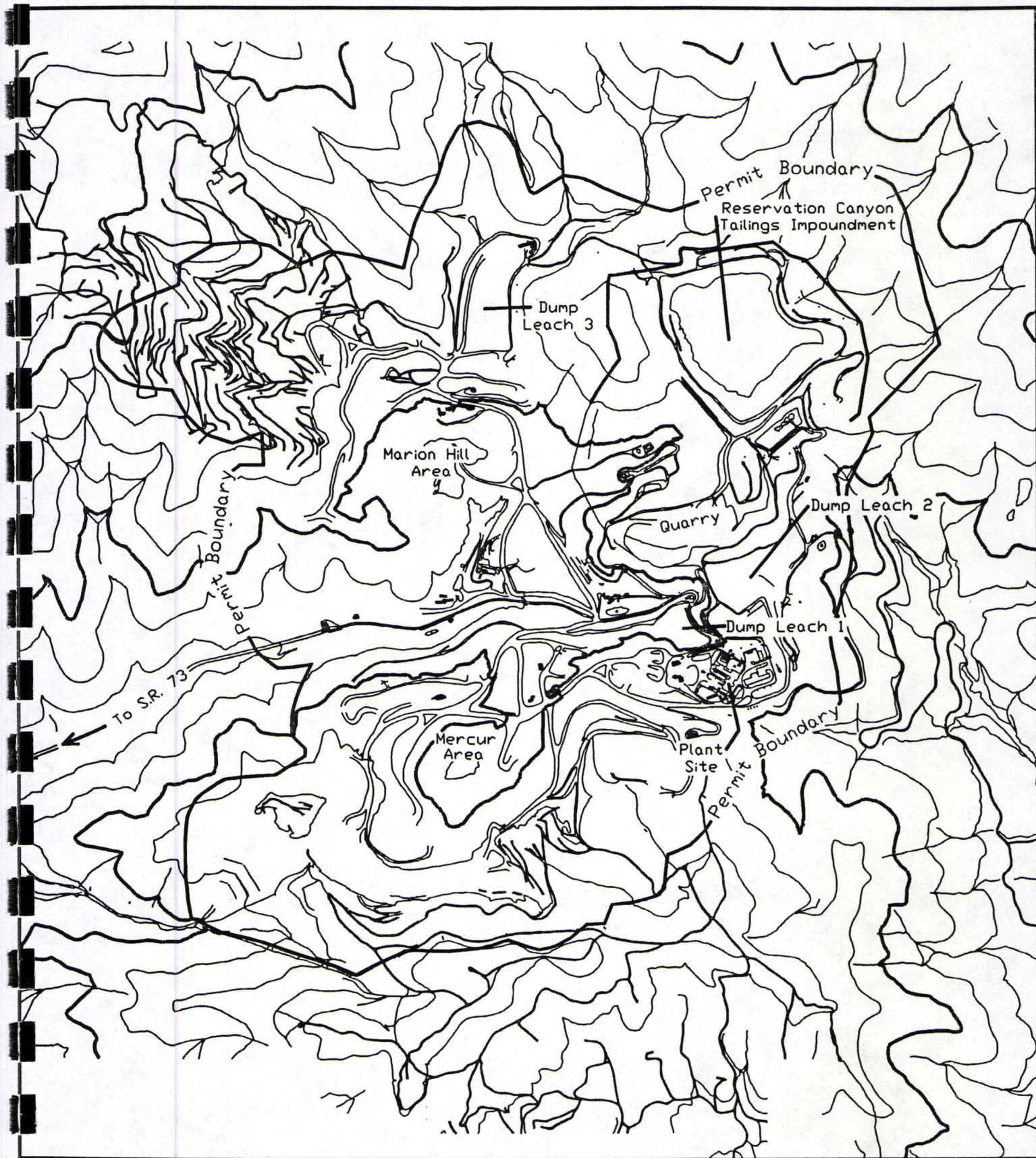
9.0 ENVIRONMENTAL CONDITIONS

Temperature, Degrees F	
Maximum Summer Heat	100
Winter Minimums	-20 to 3
Yearly Average	46.4
Annual Rainfall Average	
	17.4 in.
Percent Occurring Between April and September	
	41
Snow Load	40 psf
Wind Conditions	
Average Velocity Range	11 to 17 mph
Prevailing Directions	From southeast and from north-northwest
Pressure	UBC 20 psf zone
Elevation Above Sea Level	7,200 ft.
Seismic Conditions	UBC Zone 3

10.0 TAILING RESERVOIR ELEVATIONS

- 10.1 The surface elevation of the Reservation Canyon tailings impoundment registered an elevation of 7305 on January 1995. The mill operations will continue to discharge tailings daily at the Site during the expansion construction. The tailings will accumulate at a rate of approximately one vertical foot per month.
- 10.2 In planning the Work, the Bidder must take into consideration the potential impact of the pond elevation rise on access, scheduling, operating safety, and all other aspects of the Work.





Flight Date: Aug. 13, 1993



BARRICK RESOURCES (USA) INC.  
Mercur Gold Mine



Title: ~/misc/location_map.dwg	
Scale: 1"=2000'	Date: Mar. 11, 1994
By: Shawn D. Davis	Contour Interval: 250'



**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS**

**FOR**

**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

II. GENERAL TERMS AND CONDITIONS  
FOR CONSTRUCTION CONTRACTS

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II. GENERAL TERMS AND CONDITIONS  
FOR CONSTRUCTION CONTRACTS

**EXHIBITS**

Exhibit A	Standard Payment Control Procedures Contract
Exhibit B	Progress Payment Certificate
Exhibit C	Contractor's Invoice Form
Exhibit D	Affidavit, Agreement, Release, and Waiver of Lien (Final Release Form)
Exhibit E	Affidavit, Agreement, Release, and Waiver of Lien (Partial Release Form)
Exhibit F	Contractor's Work Authorization
Exhibit G	Contract Amendment
Exhibit H	Project AED Rates



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 1.0 DEFINITIONS

1.0 Wherever these words occur in the Contract Documents, they shall have the following meaning:

- a. "Owner"  
Barrick Mercur Gold Mine, with offices in Tooele, Utah.
- b. "Engineer"  
The senior mining engineer appointed by the Owner to be its representative.
- c. "Project"  
The Reservation Tailing Impoundment Expansion Project involves raising the upstream buttress an additional 15 feet from a confinement elevation of 7315 to a confinement elevation of 7330 and extending a portion of the impoundment liner from the 7320 elevation to the 7340 elevation.
- d. "Site"  
The lands of the Owner under, in, or through which the Work is to be executed.
- e. "Work"  
The work to be performed as specified in the Contract Agreement and referred to in the Contract Documents all inclusively as "the Work."
- f. "Bidder"  
The party (or parties) submitting a Proposal to perform the Work.
- g. "Proposal" (or "Bid")  
The written offer setting forth the price(s) to perform the Work, as submitted by the Bidder to the Owner.
- h. "Contract"  
The contract entered into by the Owner and the Contractor including all of the documents listed under Article 2.0 hereof, and others, if any, listed in the Contract Agreement or in a subsequent Change Agreements signed by the Owner and the Contractor.
- i. "Contract Agreement"  
The principal document of the Contract, signed by the Owner and the Contractor, that specifies the scope of the Work, schedule for the Work, and the total Contract Price.
- j. "Contractor"  
The party which has executed a Contract Agreement for the Work with the Owner.
- k. "Subcontractor"  
The party which, with approval of the Owner, has executed a subcontract with the Contractor for the performance of a part of the Work.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- l. "Contract Price"  
The total amount of the charges for the Work ("estimated" or "fixed lump sum") stipulated in the Contract Agreement subject to such additions or deductions as may be made under the terms and conditions of the Contract.
- m. "Contract Unit Prices"  
The fixed unit prices or rates established by the Proposal which, initially, are applied to estimated measurements of volume, time, or other units of performance to establish an estimated Contract Price, and, which ultimately, are applied to actual measurements to establish a final Contract Price.
- n. "Contract Amendment"  
The document signed by the Contractor and the Owner to amend the Contract to provide for changed or extra work and, accordingly, an increase or decrease in the Contract Price.
- o. "Specifications" and "Drawings"  
Those specifications or drawings of a technical and/or a contractual nature referred to in the Contract.
- p. "Mechanical Acceptance"  
The written declaration by the Owner that any operable unit of equipment or separable portion of the Work is mechanically operative to the extent that all of the deficiencies which can be determined prior to the initiation of use have been corrected by the Contractor.
- q. "Final Acceptance"  
The written Final Acceptance of the Work issued by the Owner following final inspection, Mechanical Acceptance, and 100 percent completion of the Work.

### 2.0 CONTRACT DOCUMENTS

2.1 The following will comprise the Contract Documents:

- 2.1.1 Letter of Invitation to Bid
- 2.1.2 Instructions and Information to Bidders
- 2.1.3 General Terms and Conditions for Construction Contracts
- 2.1.4 Specifications (as included and listed)
- 2.1.5 Form of Proposal
- 2.1.6 Contract Agreement
- 2.1.7 Contract Amendments (as required)
- 2.1.8 Drawings and other documents referred to as "attachments" in any of the above.



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- 2.2 The Contract Documents are intended to describe all of the obligations of the Contractor and the Owner, and are intended to be correlative and complementary. Any work required by one document and not mentioned in another shall be executed as though required by all documents. Should there be any conflict between any of the above documents and the Contract Agreement, the Contract Agreement shall prevail over the other document.
- 2.3 Questions by the Contractor regarding any of the documents shall be referred to the Engineer.
- 2.4 The Contractor shall immediately, upon discovery, notify the Engineer in writing of any apparent errors or discrepancies in the Contract Documents. The Owner will not accept any later excuses or claims based on alleged errors not clarified in due time.

### 3.0 CONTRACT TYPES

- 3.1 Dependent upon the nature of the services to be contracted for and/or the status of design and engineering at the time of the Contract award, the type of Contract will be designated according to one of the following categories (for purposes of Contract Price and payment method):
- a) Fixed Lump Sum ... (with a fixed Contract Price).
  - b) Fixed Unit Prices ... (with an estimated Contract Price, with provision to convert to Fixed Lump Sum when quantities are defined).
  - c) A combination of Fixed Lump Sum and Fixed Unit Price ... (with an estimated Contract Price).
- 3.2 The Contract Documents will identify the Contract type and will furnish payment terms and conditions for the specific type of Contract to be employed in the Work.

### 4.0 CONTRACTUAL RELATIONSHIP

- 4.1 In the performance of the Contract, the Contractor shall operate as an independent Contractor. The Contractor shall hold the Owner free and harmless from all liability, costs, and charges arising out of, or in connection with, any act or representation of the Contractor, its agents, or its employees.

### 5.0 DESIGNATION OF REPRESENTATIVES

- 5.1 The Contractor shall designate in writing a competent representative who, on behalf of the Contractor, will have complete charge and responsibility for the Work.
- 5.2 The Owner hereby designates the Engineer as its representative and will advise the Contractor in writing of the name of the individual appointed to speak on behalf of the Owner under the Contract.
- 5.3 The representative so designated shall be available at all reasonable times.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 6.0 ENGINEER'S RESPONSIBILITY

- 6.1 The Engineer shall be the sole representative of the Owner for matters pertaining to the evaluation of contractors and subcontractors; inspection, coordination, and scheduling of the Work; approval of progress payments; and general project management services.

### 7.0 NON-WAIVER OF DEFAULTS

- 7.1 Failure by the Engineer or the Owner to, at any time, enforce or require strict compliance with any terms or conditions of the Contract shall not constitute a waiver of, or affect, or impair such terms or conditions in any way; not shall such failure affect the right of the Owner to avail itself at any time of such remedies as it may have for any subsequent breach of such terms or conditions by the Contractor.

### 8.0 NOTICE TO PROCEED

- 8.1 The Contractor shall not commence the Work until written notice to proceed has been received from the Owner.

### 9.0 CONTRACTOR'S RESPONSIBILITY

- 9.1 The Contractor shall furnish all of the equipment, work, labor, and material necessary to carry out the Work and to provide a complete and workmanlike job. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown and mentioned in both. In case of conflict, the Specifications shall govern. In case of discrepancies, the matter shall be submitted to the Engineer, whose interpretation shall govern.
- 9.2 The Contractor shall assume responsibility for incorporating into the Work anything which, though not mentioned in the Drawings or Specifications,, could be reasonably inferred to be necessary to accomplish the Work.
- 9.3 With the exception of those items and services, if any, which the Contract expressly states will be furnished by others, the Contractor shall be solely responsible for the supply of any item or service necessary for the Contractor's performance including, without limitation, the following:
- a. Transportation of all personnel, material, and equipment to and within the Site
  - b. Unloading, handling, and storage of all material and equipment to be furnished or used by the material and equipment to be furnished or used by the Contractor;
  - c. Clean-up and minimization of debris and surplus material;
  - d. Provision of utilities and heat;
  - e. Protection against weather and related events;
  - f. Security against theft, arson, vandalism, and other criminal acts; and



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- g. Maintenance and repair of the Contractor's materials and equipment and the Work until the issue of the Final Acceptance by the Owner.

- 9.4 The Contractor assumes, and shall be responsible for minimizing, risks incident to the Work including, without limitation, those for which no extension of time is allowable.

### 10.0 INSPECTION, FITTING, AND CHANGES BY THE CONTRACTOR

- 10.1 The Contractor shall be responsible for the timely inspection of any work at the Site done others which may affect the Contractor's Work or to which the Work must be joined to ascertain the suitability of this work done by others for use in relation to the Work. The Contractor shall immediately advise the Engineer of any deficiencies therein and the Engineer shall have a reasonable time to have such deficiencies corrected.
- 10.2 The Contractor shall be responsible for making such measurements and adjustments to the Work as are required to insure proper fit between the Work and any adjacent or contiguous work.

### 11.0 SITE AND WORKING CONDITIONS

- 11.1 Except as may be otherwise specifically stated in the Contract, the Contractor shall be deemed to have inspected and to have assumed the risks of loss and expense which may arise out of the condition of the Site including, without limitation, the present subsurface conditions or subsurface conditions which may occur during the course of the Work, and including, without limitation, labor conditions at the Site and the need of the Contractor to coordinate with that of others in strict accordance with the instructions of the Engineer.

### 12.0 COMPLIANCE WITH LAW, PERMITS, AND REGULATIONS

- 12.1 In the performance of the Work, the Contractor at all times shall comply with any and all laws and any and all rules, regulations, and orders of public authority applicable or pursuant hereto whether Federal, State, or local including, but not limited to, safety, building, and wiring codes, wages, unemployment compensation, workmen's compensation, and social security laws. The Contractor shall file all reports, pay all axes, fees, and charges required by such laws, rules, regulations, or orders; and shall, without reimbursement, indemnify and hold the Owner harmless against all liabilities and penalties resulting from any actual or claimed violation on the part of the Contractor to fully comply with any such laws, orders, rules, and regulations. The Contractor shall fully comply with the "Fair Labor Standards Act of 1938" as amended and all of the Contractor's invoices shall so certify.
- 12.2 The Contractor shall possess, or obtain at the Contractor's expense, all of the necessary contractor's licenses and other permits normally obtained by a contractor in the ordinary course of its business.
- 12.3 The Owner shall secure and pay for all permits, licenses, and easements for permanent structures and all necessary authorities, permits, licenses, priorities, and clearances required to be produced by and in the name of the Owner for performance of the Work.

II. GENERAL TERMS AND CONDITIONS  
FOR CONSTRUCTION CONTRACTS

13.0 INSPECTION AND REJECTION OF MATERIALS AND WORKMANSHIP

- 13.1 The Work, including materials and workmanship performed, will be subject to inspection and tests by the Owner at any reasonable times at any and all places where such manufacture or performance is carried out. The Contractor shall provide the Owner with advance notice of readiness for inspection as specified in the Contract within the time specified or otherwise not less than two (2) nor more than four (4) working days prior to the anticipated date of completion. Failure by the Owner to perform any inspection or test or to discover defects or to object thereto shall not prejudice or operate as a release or waiver of the rights of the Owner including the right to inspect or reject the Work at a later time, nor shall it release the Contractor from any obligations for the satisfactory performance and completion of the Work.
- 13.2 The Contractor shall bear the expense of uncovering and recovering Work specifically if such work is covered without the Engineer's consent before an inspection is made.
- 13.3 If the Engineer orders the uncovering of the Work not specifically subject to prior inspection hereunder, the Owner will bear the reasonable direct cost of uncovering and redoing the affected Work unless any defect or non-compliance with the Contract is found, in which case all of the exposure and remedial costs shall be borne by the Contractor.
- 13.4 The Owner shall have the right to expedite Contractor-furnished materials as required to assist the Contractor to meet the specified completion date for the Contract.

14.0 CLAIMS, ASSIGNMENTS, GARNISHMENT, AND ATTACHMENTS

- 14.1 The Contractor shall not assign any of its rights hereunder without the written consent of the Owner. No assignment shall be attempted by the Contractor within seven (7) days of prior actual notice to the Owner. The Owner shall have the right to require from the Contractor a hold-harmless agreement, a full release and indemnity, and a bond satisfactory to the Owner.
- 14.2 In any case, or in the event of any claim, attachment, or garnishment, the Owner shall have, with such notice from the Contractor, the right to take one or more of the following actions:
- a. To make payment to the Contractor as the exclusive agent of any garnishor, assignee, or claimant, notwithstanding any such assignment, garnishment, or claim;
  - b. To set off a counterclaim against the Contractor or its assignee or any garnishor, claimant, or other person or entity with respect to the amount involved, notwithstanding that such set off or counterclaim may arise out of a transaction or occurrence unrelated to the Contract, whether it occurs or arises before or after the date of such assignment or notice thereof;
  - c. To recover, in whole or part as the Owner may elect, from the Contractor or out of any amount claimed, assigned, attached, or garnished or out of any amount theretofore or thereafter owed to the Contractor all of the damages, costs, and expenses incurred in relation to such claim, assignment, garnishment, or attachment, including court costs and attorney's fees;



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- d. To withhold any and all amounts until the Owner is certain in its sole judgment to whom such funds should be paid without liability on the part of the Owner in any event to pay such sum more than once;
- e. To exercise each and every right stipulated in the Contract including the right to withhold;
- f. To require, as a condition to payment, a full and complete release in favor of the Owner, in form and substance satisfactory to the Owner, from each and every person or entity which in the sole judgment of the Owner may be a claimant to such payment or any other payment therefore or thereafter paid or due to the Contractor.

### 15.0 SUBCONTRACTS

- 15.1 The Contractor shall not subcontract any part of the Work without the prior written approval of the Owner; and in each individual instance, the scope of the Work to be subcontracted will be subject to the prior written approval of the Owner.

### 16.0 DRAWINGS PREPARED BY THE ENGINEER

- 16.1 The Drawings issued by the Engineer may be furnished in various stages of development, for example: Rev. A, B, C, etc. for preliminary drawings , , , or, Rev. 0, 1, 2, etc. for drawings "Approved for Construction." All of the Drawings are subject to revision at any time. In all instances, the Drawing which is assigned the highest revision designation shall be considered to be the governing Drawing and the Work shall be performed by the Contractor in accordance with that Drawing. Preliminary drawings shall not be used to perform fabrication or construction.
- 16.2 The Contractor, upon receipt of a revised Drawing, shall be responsible to immediately determine what revisions have been made and to decide if those revisions will have any impact on the cost or the time required to perform the Work. If there is such an impact, the Engineer must be notified as hereinafter provided for under Section 17.0, Changed and Extra Work.

### 17.0 CHANGED AND EXTRA WORK

- 17.1 The Owner shall have the right to order changes in the Work during the execution of the Contract. If such changes will involve extra costs to the Contractor or will adversely affect the Work, the Contractor shall promptly so advise the Engineer in writing in such detail as the Contractor considers reasonable, including an estimate of the effect of the change on time and performance. Notification shall be given not later than two (2) working days after the change is ordered. If such notice is not so given by the Contractor, it shall be deemed by the Owner that no additional compensation or other adjustment in favor of the Contractor is due to the Contractor. If such notice is given by the Contractor or if, in the opinion of the Engineer, the execution of such change involves a reduction in the amount of expense of the Contractor, the Owner and the Contractor shall endeavor to agree upon an adjustment to the affected terms of the Contract, including the Contract Price. Increases in the Contract Price or reductions in the Contractor's obligations will only be effective if made by a Change Agreement agreed to and signed by the Owner and the Contractor. The adjustment to the Contract Price will be made on the following basis:

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- a. To the extent applicable, such adjustment shall be made upon the basis of cost provisions and unit prices specified in the Contract.
  - b. Any adjustments not covered by the preceding subparagraph (a) shall be limited to adjustments to take into account only the Contractor's direct costs plus a reasonable amount to cover over head and profit.
- 17.2 If so authorized by the Owner in writing in accordance with Section 27.0, Work Authorization, the Contractor shall proceed with the change prior to the time the amount of any price or other required adjustment is determined; and the parties shall thereafter use their best efforts to reach mutual agreement of the points on which they have not agreed. If the disagreement involves compensation, the Owner shall have the right to pay the Contractor, without prejudice to any claim by either party, the amount of adjustment which, in the Owner's judgment, based on the facts then known to it, is appropriate. This adjustment shall not then be subject to further discussion; however, this provision shall not be construed to reduce or limit the Owner's rights or remedies under this or any other provision including the right to recover overpayments.
- 17.3 Increases in the Contract Price that are on a cost-reimbursable or unit-price basis will be reimbursed as specifically provided in the Contract, promptly after the submission of an invoice satisfactory to the Engineer, with support satisfactory to the Engineer, or the units are furnished. Increases in the Contract Price that are on a fixed-amount basis, including fees, will be paid in monthly installments which, in the judgment of the Engineer, are proportionate to the progress of the changed part of the Work during the calendar month preceding that in which each payment is made. These payments by the Owner will be subject to a retention proportionate to the retention otherwise specified in the Contract.
- 18.0 COMPLETION OF THE WORK
- 18.1 The Work shall be completed by the time, or times, and in the sequence specified in the Contract Agreement or in the Contractor's schedule, approved in writing by the Owner. In cases where there are no such schedules, the times and sequences shall be fixed by the Engineer, whose judgment shall prevail. The Contract Price shall be deemed to include all of the costs required to meet such completion dates. If so directed by the Engineer, the Contractor shall, without additional charge, work such overtime and shall take such other action as is practically possible to avoid or to minimize the effect of delays.
- 18.2 No promise, representation, or warranty shall be deemed to be made to the Contractor by reason of the Owner's specification of the time or times for completion.
- 19.0 CORRECTION OF DEFECTIVE WORK
- 19.1 Any of the Work not performed in accordance with the Drawings and Specifications, or with the intent thereof, or of the Contract, and not approved in writing by the Engineer, shall be corrected immediately, without any delay to the progress of the Work, at no additional cost to the Owner. Any and all corrections to defective work must be done in keeping with the terms and conditions of the Contract.



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 20.0 DELAYS

- 20.1 The Contractor shall, in writing, promptly, and in no event later than three (3) working days after the Contractor is aware of the delay, advise and thereafter keep advised the Engineer concerning any delay or additional delay in the Work. Without limitation, the Contractor's responsibility for meeting the Specifications for the completion of the Work shall not be excused due to delays from any causes (a) foreseen or foreseeable at the time the Contract Agreement is signed or, (b) normally incident to the Work or, (c) due to any act or omission of the Contractor.
- 20.2 Except for those delays above mentioned, if the delay results from Force Majeure as defined in Section 21.0, Force Majeure, or from other reasons which, as a matter of law, excuse the Contractor from performance within the time specified, the Contractor's time for completion shall be extended to the extent of such delay, provided that the Contractor complies with the notification provisions of Paragraph 20.1.
- 20.3 The provision of Paragraph 20.2 shall be the Contractor's sole remedy for such a delay except for a delay caused by the direct default of the Owner, in which event the Contractor shall be entitled, to the extent the costs are so caused, and provided that the Contractor thereafter handles the matter as a change under the provision of Section 17.0, Changed and Extra Work, to recover its provable additional direct field costs; however, this provision shall be the limit of the Contractor's remedy in such case.

### 21.0 FORCE MAJEURE

- 21.1 Neither the Contractor nor the Owner shall be considered in default in the performance of its obligations hereunder to the extent that performance of such obligations are delayed, hindered, or prevented by Force Majeure. Force Majeure shall be any cause beyond the control of the parties hereto which they could not reasonably have foreseen and guarded against. Force Majeure shall include, but shall not be limited to, acts of God, strikes, lockouts, fires, riots, civil commotion or civil unrest, incendiarism, interference by civil or military authorities, compliance with the regulations or order of any governmental authorities, and acts of war (declared or undeclared).

### 22.0 SUSPENSION OR TERMINATION FOR CONVENIENCE

- 22.1 The Owner shall have the right to suspend or terminate the Contract at any time for the convenience of the Owner. Such suspension or termination will be made in writing and may include the whole or any specified part of the Contract.
- 22.2 If the Contract, or a specified part thereof, is suspended for convenience of the Owner and such suspension unreasonably delays the progress of the work and causes additional expense or loss to the Contractor in its performance of the work, not due to the fault or negligence of the Contractor, the Contract Price will be subject to adjustment in an amount equal to the actual cost incurred by the Contractor resulting from the suspension. Such costs must be substantiated by written records or otherwise proven to the satisfaction of the Owner. Further, if applicable, the time of performance of the Contract will be subject to extension by the actual duration of the suspension plus a reasonable additional period for remobilization. The Contract will, accordingly, be amended by Contract Amendment, provided, however, that any claim by the Contractor for an adjustment hereunder must be

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

asserted within thirty (30) calendar days after receipt of written notice from the Owner to resume the Work.

- 22.3 If the Contract, or any specified part hereof, is terminated for the convenience of the Owner, payment to the Contractor will be made promptly for that part of the Work actually completed including: (a) engineering; plus, (b) materials or equipment under fabrication in the Contractor's own plant; plus, (c) materials or equipment under fabrication in vendor's plants' plus, (d) materials or equipment already been shipped; plus, (e) construction, if any, completed to date on the Site; less, (f) any payments previously made to the Contractor. The reasonable value of each of the foregoing categories against which the Contractor has incurred costs prior to the effective termination date will be established by: (i) the Contract Prices; (ii) any Contract Unit prices or itemization of the Contract Price previously submitted by the Contractor and accepted by the Engineer; or, (iv) a combination of the foregoing.
- 22.4 A reasonable cancellation charge to the Contractor by any vendor, and properly due as a contractual obligation of the Contractor to any vendor for items fabricated but not shipped, will be reimbursed to the Contractor at the actual cost as part of the costs of termination, or, in lieu thereof, the Owner may elect to pay the fair market value and take delivery on such completed or incompleated fabricated items.
- 22.5 In addition, the Contractor will be paid a reasonable cancellation charge to cover costs, if any, to terminate engineering and fabrication commenced by its own forces prior to the effective termination date. Material and equipment completely or partially fabricated but not shipped may, at the option of the Owner, be accepted by the Owner at the fair market value and deducted from the cancellation charges established with the Contractor.

### 23.0 TERMINATION FOR CAUSE

- 23.1 Should the Contractor, in the opinion of the Owner, at any time refuse or neglect to supply or maintain a sufficiency of properly skilled labor, or fail in any respect to perform the Work of any separable portion thereof with promptness and diligence, or fail in the performance of any of the agreements on its part contained herein, or should the Contractor become insolvent or be placed in liquidation or under judicial management, the Owner shall have the right to, after a minimum time of forty-eight (48) hours following written notice to the Contractor, employ another contractor and to deduct the cost thereof from any money due, or thereafter to become due, to the Contractor under the Contract. The Owner shall also have the right to terminate the Contractor's right to proceed with the Work or such part of the Work as to which such defaults have occurred.
- 23.2 In the event of termination for cause, the Contractor shall not be entitled to receive any further payment until the work is completed. If the expense of completing the Work plus compensation for additional managerial and administrative services and such other costs and damages with regard to completion of the Work as the Owner may suffer exceeds the unpaid balance, the Contractor shall promptly pay the difference to the Owner. Failure of the Owner to exercise any of the rights given the Owner herein shall not excuse the Contractor from compliance with the provisions of the Contract nor prejudice in any way the right of the Owner to exercise any such rights in respect of any subsequent failure by the Contractor.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- 23.3 Upon termination of the Contract for cause, the Contractor shall agree:
- 23.3.1 That the obligation of the Contractor shall continue as to work already performed and to materials furnished, and as to commitments assumed by the Contractor prior to the date of termination.
  - 23.3.2 That the Contractor shall be entitled only to a pro rata compensation for the Work already performed, including material for which it has made firm contracts. The Owner shall be entitled to that material. However, the Contractor's aforesaid pro rata compensation shall in no event exceed the reasonable costs of the work done and the materials supplied by the Contractor to the time of termination plus an equitable profit on the work done prior to the date of termination. The following items shall not be considered in arriving at said equitable allowance:
    - a. Anticipated profits applicable to uncompleted portions of the Work.
    - b. Consequential damages.
    - c. Expenses incurred by the Contractor due to the failure of the Contractor or its vendors and Subcontractors to discontinue the Work with reasonable promptness after written notice of termination has been given to the Contractor.
    - d. Losses on other contracts or from sales or exchanges of capital assets.
- 23.4 No settlement payment will be made to the Contractor hereunder until the Contractor has submitted:
- a final statement supported by vouchers; and
  - a signed form of release or other evidence satisfactory to the Owner that the Contractor has paid in full for all of the labor, materials, equipment, services subcontracts, applicable taxes, and other costs and assessments due under the Contract.
- 23.5 The Owner shall be entitled to deduct, from any and all monies owing to the Contractor hereunder, additional expenses directly caused by, or arising out of, breach by the Contractor of any of its agreements, covenants, warranties, and guarantees hereunder, or of any default by the Contractor. Consequential damages will not be deducted.
- 23.6 In the event of termination for cause, the Owner shall give written notice by means of a registered letter addressed to the Contractor at the address set forth in the Contract Agreement. Subject to the directions set forth in the termination notice, the Contractor shall immediately discontinue the Work and the placing of orders for further services, material, and equipment and shall, as directed, effect cancellation of all existing orders and subcontracts and thereafter perform only such work as may be necessary to preserve and protect the work already in progress.



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- 23.7 The termination provision set forth in this Section 23.0 shall be concurrent with, and in addition to, any other rights or remedies at law or in equity which the Owner shall have for the enforcement of its rights under the Contract and its remedies for any default of the Contractor under the conditions hereof.
- 23.8 If the Owner should, in good faith, terminate the Contract for default as herein provided, or for breach, the termination shall be deemed to be a termination by the Owner for reasons other than cause. Payment will be made as in Section 22.0, Termination for Convenience. In no event shall the Owner's liability or the Contractor's recovery under this Paragraph 23.8 exceed the total amount determined by application of Paragraph 22.3 hereof.

### 24.0 PATENTS AND SIMILAR RIGHTS

- 24.1 The Contractor shall indemnify and save harmless the Owner from all of the costs, damages, losses, and expenses that may occur as a result of any infringement or claim of infringement of any patent or proprietary right (including costs of litigation). The Contractor shall also indemnify and save harmless the Owner for changes or replacements and related costs for changes or replacements to avoid infringements arising from the performance of the Work.
- 24.2 At the Owner's request, the Contractor shall defend any suit or action arising out of any such infringement or claim; however, the Owner shall be entitled to be fully advised and to participate in any such suit or action. No such suit or action shall be settled, discontinued, nor shall judgment be permitted to be entered if, in the Owner's opinion, the interest of the Owner would be adversely affected.
- 24.3 The Contractor's indemnification will not include items manufactured to the Engineer's design unless such items have been originally submitted or suggested by the Contractor.

### 25.0 WARRANTY

- 25.1 In addition to any other warranties of the Contractor expressed or implied by law, the Contractor shall warrant that all items and services provided in the Work are in accordance with the Contract and conform to the Specifications, Drawings, and data which are part of the Contract; that all such items and services are fit for the use specified or intended; and that all of the materials and workmanship provided in the Work are of the highest quality and are the best of their kinds.
- 25.2 Without limitation to the Owner's other rights and remedies, in cases where this warranty is breached, or where defects or deficiencies appear prior to twelve (12) months after the date of the letter of Final Acceptance and provided that the Contractor does not, within the time limits set by the Owner, promptly begin and diligently complete the repair of the defect in accordance with the Owner's required schedule, the Owner shall have the right to either reject the items in whole or in part, in which case, to the extent of rejection, the risk of loss, cost of repair, cost of return and storage, and other damages, including all of the costs of replacement from such sources as the Owner may elect, will be charged against the Contractor's account; or the Owner, at its option, shall have the right to repair all or part of the items not rejected and to charge the costs incurred for repairs to the Contractor plus an amount equal to the diminished value of the items as repaired.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- 25.3 The Contractor shall include, in all subcontracts entered into under the Contract, an identical warranty extending to the Contractor and the Owner; and, as part of its responsibilities hereunder, the Contractor shall enforce such warranties to their fullest extent.

### 26.0 CONTRACT PAYMENTS

- 26.1 The Contractor shall agree to accept the Contract Price as full compensation for all of the Work embraced in the Contract and for all of the losses or damage arising out of the nature of the Work, the action of the elements, or from any unforeseen or unknown difficulties or obstructions which may arise or be encountered in the execution of the Work until the Final Acceptance, and for all risks of every description connected with the Work.
- 26.2 The Owner will make partial payments as the Work progresses. Payments will only be made upon the receipt of invoices accurately prepared and properly supported in accordance with procedures established by the Engineer and by the exhibits attached hereto (Exhibits A, B, C, and E).
- 26.3 A ten percent (10%) retention will be withheld by the Owner from each progress payment. The retention will be released by the Owner upon full completion of the Work by the Contractor and the issue of the Final Acceptance by the Owner. The Contractor, shall, prior to release of the retention by the Owner, furnish a release-of-claims form (Exhibit D) certifying that the Contractor has paid in full for all of the wages, materials, services, taxes, social benefit laws, and other like costs.
- 26.4 The Owner shall have the right to withhold payments for suspect or defective work not remedied, for claims filed (or for reasonable evidence indicating the probability of filing of claims), or for failure of the Contractor to make payments properly to its Subcontractors or vendors. If the foregoing causes are removed, the withheld payments will promptly be made by the Owner. If the said causes are not removed, upon written notice, the Owner shall have the right to cause the same to be rectified at the Contractor's expense. Should any valid indebtedness arise after the final payment is made, the Contractor shall reimburse the Owner for any amount the Owner has paid or may pay to discharge any such indebtedness or any claim affecting the title to the Work or the property of the Owner.
- 26.5 Any failure or lack of cooperation by the Contractor to prepare or submit reports, progress schedules, or plans for changes contemplated in its operations, or to assist in the preparation of the same promptly, as required, shall be cause for the Owner to withhold all or part of the progress payment then pending until such time as the Contractor has met the reporting requirements to the satisfaction of the Owner.
- 26.6 All of the monies due to the Owner under the terms of the Contract to compensate the Owner for backcharges as provided in Section 29.0, Backcharges by the Owner, or for other expenses incurred on behalf of the Contractor will be recorded in writing and deducted as they occur from each periodic progress payment to the Contractor.
- 26.7 No payment, except the final payment, shall be evidence of the satisfactory performance of the Contract, either wholly or in part, by the Contractor; and no payment, including the final payment, shall be construed to be an acceptance of defective work or improper material. The final payment shall not relieve the Contractor from its responsibility for the discharge of

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

claims or from making available to the Owner for examination and audit all of the records pertaining to the Work performed on a cost-reimbursable or chargeable basis.

### 27.0 WORK AUTHORIZATION

- 27.1 The Owner will issue a written Work Authorization (Exhibit F) to direct the Contractor to proceed in instances where the processing of a formal Change Agreement may delay the progress of the Work.

A Work Authorization will be used on occasions where:

- Work minor in scope must be immediately authorized at the Site; or,
- Construction must proceed concurrent with the preparation of a revised estimate of cost to perform the Work.

In some instances, the Work Authorization may be issued to direct the Contractor to proceed pending resolution of a dispute over whether or not the work actually comprises a change in the Contract or involves extra work.

- 27.2 No payments to the Contractor will be made based upon a Work Authorization. Such costs will be accrued until the added work and the cost of the same is incorporated into the Contract by a Change Agreement.

### 28.0 CHANGE AGREEMENTS

- 28.1 The Contract Price established in the Contract Agreement shall not be subject to change except as expressly provided in the Contract or by amendment to the Contract in the form of a Change Agreement (Exhibit G) agreed to and signed by the Contractor and the Owner. Unit-price and cost-plus type contracts containing as estimated Contract Price shall, in all cases, prior to the presentation of a final invoice by the Contractor, be summarized by a Change Agreement to confirm the final Contract Price.

### 29.0 BACKCHARGES BY THE OWNER

- 29.1 The Owner shall have the right, in the event of the inability or refusal on the part of the Contractor to correct defective or incomplete work, or to perform any part of the work in a timely manner, to perform such work with the Owner's own forces or those of another contractor and to charge the resultant costs as a backcharge against the Contract Price pursuant to the following procedures:
- a. Notification: The Owner shall promptly notify the Contractor by telephone, cable, or other form of direct communication, and whenever possible, through its appointed representative.
  - b. Opportunity: Whenever time will permit, the Contractor will be afforded a reasonable opportunity to perform the Work with its own forces. However, the Owner shall determine how and when the Contractor will proceed.



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- c. Written Notice: The Owner shall notify the Contractor in writing by a Notice of Backcharge.
- d. Labor and Equipment: All of the labor and construction equipment shall be backcharged to the Contractor at the actual cost to the Owner plus a surcharge of 25 percent for administrative and handling costs.
- e. Owner Equipment: Any equipment owned by the Owner and used for the backcharged work shall be charged to the Contractor at the full AED (Associated Equipment Distributors) equipment rental rate for the same or equivalent equipment. All of the operators and other Owner-employed labor will be charged at the Project hourly rates of \$21.00/hour for Owner-employed operators or labor or at the listed rates (Exhibit H) plus a surcharge of 25 percent for administrative and handling costs.
- f. All of the material and subcontracts: Material and subcontracts will be backcharged to the Contractor on the basis of the actual invoiced cost plus a surcharge of 20 percent for administrative and handling costs.
- g. Other Costs: The Owner shall notify the Contractor in advance of other costs, if any, to be incurred by the Owner. If no agreement is concluded from such notification, the Owner shall backcharge the Contractor as specified above for material and subcontracts.
- h. Records: The Owner shall record all of the work performed as a backcharge against the Contract on a daily basis on a Notice of Backcharge and shall present this daily record for acceptance and signature. In no event shall the absence of the Contractor's representative or its refusal to sign the Notice of Backcharge or any daily records delay the performance of work which the Owner considers to be necessary for the continuation and completion of the Project.
- i. Payment: The sum total of the backcharge shall be the total of all of the above charges. The Owner shall have the right to either deduct the backcharged amounts periodically as they are incurred or in one final payment when the Work is complete and when account has been made for all of the costs.
- j. All of the material and subcontracts: Material and subcontracts will be backcharged to the Contractor on the basis of the actual invoiced cost plus a surcharge of 20 percent for administrative and handling costs.
- k. Other Costs: The Owner shall notify the Contractor in advance of other costs, if any, to be incurred by the Owner. If no agreement is concluded from such notification, the Owner shall backcharge the Contractor as specified above for material and subcontracts.
- l. Records: The Owner shall record all of the work performed as a backcharge against the Contract on a daily basis on a Notice of Backcharge and shall present this daily record for acceptance and signature. In no event shall the absence of the contractor's representative or its refusal to sign the Notice of Backcharge or any daily records delay the performance of work which the Owner considers to be necessary for the continuation and completion of the Project.

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- m. Payment: The sum total of the backcharge shall be the total of all of the above charges. The Owner shall have the right to either deduct the backcharged amounts periodically as they are incurred or in one final payment when the Work is complete and when account has been made for all of the costs.

### 30.0 FINAL ACCEPTANCE OF THE WORK

- 30.1 The Owner will issue a formal letter of the Final Acceptance, affirmed by the signature of the Engineer, promptly after the Owner is satisfied that all of the requirements of the contract have been met by the Contractor with regard to the performance of the Work; Mechanical Acceptance; equipment performance warranties; delivery of material, equipment, and spare parts; submittal of special guarantees and operating procedures; submittal of final records for cost-plus work (if any); and presentation of a final release-of-claims form (Exhibit D).
- 30.2 The Owner shall have the right to retain the final payment or the retained percentage provided for in the Contract Agreement, either to the full total or to a partial amount thereof, as considered by the Owner to be reasonable to assure full compliance with the Contract by the Contractor.
- 30.3 The Owner will either accept the Work performed hereunder by the Contractor as a whole or in separately defined parts, in which case any funds retained by the Owner will be reduced in accordance with the pro rata value of those accepted parts.  
In the event that the letter of the Final Acceptance covers all of the Work, the letter will state ... "All of the Work under the Contract is accepted," and the letter will be marked "FINAL ACCEPTANCE."
- 30.4 In the event that the letter of the Final Acceptance includes only a part of the Work, the letter of acceptance will clearly define and limit the acceptance to the part(s), section(s), or item(s) which are accepted at the time. In addition, the letter will be numbered "Acceptance Letter No. 1" and subsequent letters will be numbered consecutively until the last part of the Work is accepted. The final letter will be marked "FINAL ACCEPTANCE."
- 30.5 The Contractor's liability after the Final Acceptance will be limited to the guarantees, warranties, and Contract conditions, which extend for twelve (12) months from the date of the letter of the Final Acceptance.

### 31.0 RELEASE AND WAIVER OF CLAIMS

- 31.1 The Owner shall require, as a prior condition to the final payment by the Owner, a full release and waiver of claims in the form attached hereto (Exhibit D). The Owner shall have the right, at its discretion prior to any interim progress payment(s) to the Contractor, to require a release for partial payment for monies earned under the Contract through a specified date (Exhibit E).
- 31.2 If, at any time, there is evidence of the existence of any claim arising out of or in connection with the performance, or default in performance, of the Contract for which the Owner may become liable, then the Owner shall have the right to discharge such claims and to assess all of the costs thereof against the balance due to the Contractor.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 32.0 COST-REIMBURSABLE WORK - ACCOUNTING AND AUDITING

- 32.1 If any part of the Work is performed on a cost-reimbursable or chargeable basis, the Contractor shall keep, and shall require each of its Subcontractors or vendors to keep, full and detailed accounts of all such costs in a form acceptable to the Owner.
- 32.2 In the event that any part of the Work is to be performed on a cost-reimbursable or chargeable basis, the Owner will include, as part of the Contract, all of the special terms and conditions that set forth all of the chargeable and nonchargeable cost items and procedures for the payment of the costs and the related Contractor's fees.
- 32.3 The Contractor shall at all times cooperate with the Engineer to amend or change any accounting procedure for cost-reimbursable or chargeable work found to be unsatisfactory; and the Contractor, after agreement on accounting procedures with the Engineer, shall not institute any new accounting procedures without the prior approval of the Engineer.
- 32.4 The Contractor shall retain all of the cost-reimbursable or chargeable accounting records for a period of two (2) years after the Final Acceptance of the Work; and, during execution of the Work, the Contractor shall, at any time, afford the Owner full access to audit the books of account and the supporting documents. The Contractor shall agree that, upon completion of the Work, copies of the books or records for cost-reimbursable or chargeable work will, upon request, be turned over to the Owner.

### 33.0 LOSS OR DAMAGE BY THE ACTIONS OF OTHERS

- 33.1 In the event that the Contractor sustains damage or loss through any delay, default, act, or omission of any other contractors, subcontractors, or their agents or employees, the Owner shall not be liable therefore; however, nothing herein contained shall be construed to limit the Contractor from pursuing its legal remedies against such other contractors, subcontractors, or their agents or employees.
- 33.2 The Contractor shall have no claim against the Owner for any damage or loss by reasons of delay, default, act, or omission of other contractors, subcontractors, or their agents or employees; however, nothing herein contained shall limit any rights of the Contractor to recover therefore against such other contractors, subcontractors, or their agents or employees. If the Contractor, by any default, negligence, or misconduct on its part, damages any other subcontractor or contractor, the Contractor shall be directly responsible to such other subcontractor or contractor for any such damage and shall indemnify and hold the Owner harmless for all such damages.
- 33.3 The limitations of Section 33.0 shall not apply to the extent that the Contractor's recovery is defeated because a similar provision does not appear in other relevant contracts with such other contractors or subcontractors; however, this provision shall not be deemed to create any greater liability on the part of the Owner than the Owner would otherwise have.

### 34.0 DISPUTES

- 34.1 Any dispute relating to the Contract involving a matter of question of law or fact common to the Owner and the Contractor shall be settled, to the extent feasible, before a single forum selected by the Owner, and a decision by such forum with respect to any such question or



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

matter shall be binding upon the Contractor, provided that the Contractor has been granted a reasonable opportunity to be represented and heard. To this end:

- a. At the written election of the Owner, all of the disputes and controversies of whatever nature arising under the Contract that cannot be resolved by mutual agreement may be submitted to arbitration, in accordance with rules of the American Arbitration Association, before a single arbitrator selected by the Owner. The place of arbitration shall be the municipality which, in the opinion of the Owner, is most reasonably convenient to the Site.
- b. If the Owner does not elect arbitration, or if, in the opinion of the Owner, any dispute involves either a matter or question of law or fact common to the Contract or involves third parties, the dispute shall, at the option of the Owner, be submitted to the forum which, in the Owner's opinion, can best determine and best settle the dispute. The decision of that forum shall be binding of the parties, provided that they have been given notice and the opportunity for adequate representation.
- c. In the event of any proceeding pursuant to Section 34.0, the Owner and the Contractor shall take action to see that proceedings before any other forum shall be stayed pending completion of these proceedings, and that the decision of the forum with respect to such proceedings shall be binding upon the Owner and the Contractor and shall supersede any contrary decision of any other arbitrators or forum.
- d. The Contractor shall consent to such service and to submit itself to such jurisdiction as is necessary to enact the purposes of Section 34.0 and further shall agree to such stays and other actions as may be necessary to effect the purposes hereof.
- e. For the purposes of this Contract, a "forum" includes an arbitration or administrative proceeding.
- f. In the event of any dispute or claim by the Contractor, the Contractor shall continue the Work in accordance with the Contract and its sole remedy shall be to pursue the remedies hereinabove set forth.

### 35.0 NON-DISCRIMINATION IN EMPLOYMENT

- 35.1 The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to insure that all of the applicants are employed, and that employees are treated equally during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause. The Contractor shall, in all solicitations or advertisements for employees placed by the Contractor or on the Contractor's behalf, state that all employment is without regard to race, religion, color, sex, or national origin.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- 35.2 The Contractor shall comply with all of the provisions of Executive Order No. 11246 of September 24, 1965 (including any amendments thereto), and all of the rules, regulations, and relevant orders of the Secretary of Labor. The Contractor shall furnish all of the information and reports required by Executive Order No. 11246 of September 24, 1965 (including any amendments thereto), and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and shall permit access to the Contractor's books, records, and accounts by the Owner and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders. In the event of the Contractor's non-compliance with the non-discrimination clauses of the Contract or with any of the said rules, regulations, or orders, the Contract may be canceled, terminated, or suspended in whole or in part; and the Contractor may be declared ineligible for further contracts in accordance with the procedures authorized in Executive Order No. 11246 of September 24, 1965 (including any amendments thereto). Other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965 (including amendments thereto), or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 35.3 The Contractor shall include the provisions of Section 35.0 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965 (including any amendments thereto), so that such provisions shall be binding upon each Subcontractor or vendor as the Owner may direct as a means of enforcing such provisions, including sanctions for non-compliance; provided, however, that, in the event that the Contractor becomes involved in, or threatened with, litigation with the Subcontractor or vendor as a result of such direction by the Owner, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

### 36.0 SECURITY, IDENTIFICATION, AND SECRECY

- 36.1 Entrance onto the Site by the Contractor's employees and all other persons will be subject to strict security rules; the Contractor shall agree to comply and to cause strict compliance therewith by its employees, Subcontractors, and vendors.
- 36.2 The Contractor shall obtain written authorization from the Engineer to enter the Site with trucks and other vehicles and shall use only the entrances designated by the Engineer for the use of contractors employed on the Project.
- 36.3 The Contractor shall require its employees and the employees of its subcontractors to, at all times while on the Site, wear the identification furnished by the Owner.
- 36.4 All designs and data furnished by or on behalf of the Owner shall be used only to perform the Contract. The Contractor shall keep such designs and data confidential, except for data which the Contractor can prove is available to the public or was in writing and already in possession of the Contractor at the time such designs and data were furnished or thereafter was rightfully received from a third party. The Contractor, upon request from the Engineer, shall execute any agreements relating to confidentiality or proprietary rights which the Owner may require.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 37.0 HYGIENE, FIRST AID, AND SAFETY

- 37.1 The Contractor shall comply with all of the safety provisions put into effect for the Project by the Engineer, and with all of the requirements and regulations of OSHA, MSHA, and the State of Utah for the control of health and safety on construction projects.
- 37.2 In the event of a situation wherein life or valuable property are in apparent imminent danger, the Contractor shall be authorized, without further special instructions from the Owner or the Engineer, to act at its own discretion to prevent injury to persons or damage to property.
- 37.3 The Contractor shall be responsible for providing its own first-aid facilities and safety equipment.
- 37.4 The Contractor shall furnish to the Owner a detailed written report of all injuries other than those requiring only first-aid treatment.
- 37.5 The Contractor shall bear sole responsibility for the safety of its own personnel employed in the Work and for any persons entering the site as agents or visitors of the Contractor.
- 37.6 The Contractor shall comply with the Federal Mine Safety and Health Act of 1977 and with all regulations and health and safety standards promulgated pursuant thereto (all of which are described hereinafter as "the Act"). Any citation, fine, withdrawal order, abatement notice, or other action by the Mine Safety and Health Administration ("MSHA") arising in connection with the Contractor's performance under the Contract which may affect the Owner's operations shall constitute a breach of the Contract and shall be sufficient cause for termination of this agreement by the Owner without limiting any other rights of the Owner.
- 37.7 The Contractor shall indemnify and save harmless the Owner for all of the costs (including attorney's fees and costs) or financial losses incurred as a result of violations or alleged violations of the OSHA and MSHA Acts related to any operation or condition under the Contractor's control or the control of the Contractor's employees or agents; for any costs or financial loss incurred in the payment of agents; and for any costs or financial loss incurred in the payment of civil penalties, in abating cited conditions, as a result of the issuance of withdrawal orders, or in pursuing or defending any legal action arising from the Contractor's duties or obligations thereunder, or in enforcing the terms of Section 37.0.

### 38.0 TOXIC AND HAZARDOUS MATERIAL CONTROL ACT

- 38.1 Compliance in Project design and function with the requirements of the applicable Federal, State, and County health, safety, and environmental protection regulations; and the Toxic and Hazardous Material Control Acts and Regulations of U.S. Government agencies (such as EPA, OSHA, MSHA, NRC, and DOT) shall be a mandatory requirement of the Contract.
- 38.2 Labels and Safety Data Sheets for all toxic or hazardous materials shall be provided with the Contract. The Contractor's failure to conform to any of the above requirements in any respect shall be corrected promptly by the Contractor upon notice thereof, and the cost of all such corrections as well as any related costs arising out of any action brought by a governmental agency in connection with such failure shall be borne by the Contractor.



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 39.0 TAXES

- 39.1 Unless otherwise specified in the Contract, all of the taxes which the Contractor may be required to pay or collect shall be borne by the Contractor and shall be deemed to be included in the fixed Contract Price or Contract unit prices specified in the Contract.
- 39.2 Pursuant to the Utah Pollution Control Facilities Act (Sec. 59-15-6, Reg. S83), sales and use tax information shall be made available to the Company. This is to fulfill the requirements of Paragraph B, Reg. S83:  
In the event part of the pollution control facility is constructed under a real property contract by someone other than the Owner, the Owner should obtain a statement from the Contractor certifying the amount of Utah Sales and Use Tax paid by the Contractor and the Owner will then be entitled to a refund of the tax paid and included in the Contract.

### 40.0 TITLE AND ADVANCE PAYMENTS

- 40.1 Title to all of the material and equipment to be installed by the Contractor as part of the Work shall pass to the Owner upon delivery to the Site; however, the risk of loss for this material and equipment shall not be transferred from the Contractor to the Owner until the issuance of the Final Acceptance.
- 40.2 In the event that advance payments are made by the Owner for such material or equipment prior to delivery or installation, or in the event that the Owner supplies items to be included in the Work, the Owner may require that the goods in process be marked or otherwise identified as being the property of the Owner, and the Contractor shall execute such documents and take such action as, in the Owner's opinion, are necessary to give the Owner the exclusive right to take possession and title thereto at any time.
- 40.3 No advance payment shall relieve the Contractor of the risk of loss or any other obligations under the Contract.

### 41.0 OWNER'S REMEDIES FOR DEFAULT OR DEFECTIVE WORK

- 41.1 In the event of any default or defective work which the Contractor does not immediately begin, and thereafter proceed with diligence, to remedy upon notice from the Engineer, or in the event of any defaults or defect which the Owner determines to be a material default or defect, or in the event that the Contractor for any reason, other than as provided under Section 20.0, Delays, fails to proceed with the Work as scheduled in accordance with the Contract, the Owner shall have the right to take such action as the Owner deems to be necessary to remedy or to avoid such default, defect, or delay, including the use of its own forces or those of others and the use of all equipment and material at the Site, all of which the Contractor shall give the Owner free access for such purpose. The Contractor shall reimburse the Owner for all of the additional costs which the Owner may incur as a result of such action.
- 41.2 In addition, in the event of such defaults or defects or delay, or in the event that the Contractor shall become bankrupt or insolvent, or in the event that the Owner shall have reasonable grounds to believe that the Contractor is bankrupt or insolvent or unable to pay its debts as they become due, the Owner shall also have the right to terminate all or part of

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

the Contractor's further work and, at the Owner's discretion, the Owner shall have the right to proceed as provided in Paragraph 41.1.

- 41.3 In the event of any such default, defect, delay, bankruptcy, or insolvency, the Contractor shall not be entitled to any further payment until the matter is remedied to the satisfaction of the Owner; the Contractor shall then be paid only such amount as is reasonably due for the work properly done by the Contractor less all of the damages (excluding consequential damages), losses, and additional expenses suffered by the Owner as a result of such default. If such damages, losses, and expenses exceed the amount due to the Contractor, such amount shall be paid immediately to the Owner by the Contractor. No remedy afforded to the Owner either under the Contract or as a matter of law shall be deemed to be exclusive.

### 42.0 INSURANCE

- 42.1 The Contractor shall comply with all of the applicable State and Federal Social Security and unemployment insurance laws. Before commencing the Work, the Contractor and its Subcontractors shall be qualified under the Workmen's Compensation Law of the State of Utah and shall at all times comply therewith.
- 42.2 The Contractor shall provide and maintain and shall require its Subcontractors to provide and maintain, until Final Acceptance, standard policies of liability insurance with coverages and minimum limits as follows:

#### TYPE OF INSURANCE

#### MINIMUM LIMIT

- |  |   |
|--|---|
| A. Workmen's Compensation Insurance  | Statutory Limit   |
| B. Employer's Liability Insurance  | \$5,000,000 per occurrence  |
| C. Comprehensive General Liability Insurance covering bodily injury and death; and damage to property, including contractual, independent contractors, and completed operations coverages. | Combined Single limit of of \$2,000,000 per accident subject to an annual aggregate property damage limit of \$2,000,000. |
| D. Comprehensive Automobile Liability Insurance covering automotive equipment used in the Work for bodily injury and property damages.   | Combined single limit of \$1,000,000 per accident.  |

- 42.3 The amount of such insurance, the forms of the policies, the issuing companies, and all matters with respect to the adequacy of protection shall be subject to the prior and continuing approval of the Owner. The Contractor shall deposit certificates of insurance with the Owner prior to commencement of the Work. All certificates shall include a provision to the effect that the Owner shall be given not less than thirty (30) days prior written notice by registered mail from the Contractor of any cancellation or change that affects the coverage.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

- 42.4 The Comprehensive General Liability Insurance shall provide the Contractor with coverage for Completed Operations, Blanket Contractual, and Independent Contractors with respect to the Work. The Contractor shall also furnish a standard endorsement naming the Owner as an additional insured party to the Contractor's Comprehensive General Liability Insurance.
- 42.5 The Owner will accept Umbrella Excess Liability Insurance as a supplement to any of the Contractor's standard liability insurance.
- 42.6 The Contractor or its Subcontractor who performs work subject to Explosion, Collapse, or Underground Damage hazards shall specifically include insurance coverage for the following:
- a) Property Damage caused by conditions subject to exclusions "X, C, or U."
  - b) Personal Injury Liability Endorsement, including deletion of employee exclusion.
- 42.7 The Owner shall procure and maintain, until Final Acceptance of the Work, all Risk and Installation Floater Insurance to include the Owner, the Contractor, and the Subcontractors as parties insured thereunder. Such insurance will cover physical loss or damage to the Work, materials, and equipment, including consumable supplies that are part of, result from, or are used in the Work. Such insurance will not cover construction equipment, tools, and facilities owned, leased, or rented by the Contractor which do not become a permanent part of the Work.
- 42.8 All of the insurance provided by the Owner shall be subject to the limitations and exclusions applying to each type of insurance as reflected in the policies issued to the Owner. Any losses (including deductibles) not recovered by the Owner, such as those related to materials in transit or to physical damage to the Work, shall be the responsibility of the Contractor, unless specifically stated in the Contract to be a reimbursable cost.
- 42.9 Neither the Contractor nor the Owner shall be liable one to another nor to their insurance carriers for any loss or damage to property resulting from or occurring in the course of the Work to the extent that the reimbursement shall be made for any such loss or damage through or by reason of insurance provided for the purpose. Both the Contractor and the Owner shall hereby waive any claim by or right of subrogation by insurers, one to another.
- 42.10 A copy of any report made by the Contractor to its insurance company relative to the bodily injury or illness of its employees or to property damage incurred on the Site shall be furnished without delay to the Owner.

### 43.0 INDEMNIFICATION

- 43.1 This section shall constitute an indemnification provision of general applicability because state laws on indemnification vary considerably, particularly with regard to indemnification against the indemnitee's negligence. Section 43.0 shall be so read and applied as to conform in all respects to applicable local law.
- 43.2 The Contractor shall indemnify and save harmless the Owner and anyone to whom the Owner may be liable, and at the Owner's behalf, against all costs, liabilities, and expenses for personal injuries, including death, resulting therefrom; and against all costs, liability, and expenses for property damage (including attorney's fees and other costs of defense) caused

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

or alleged to have been caused by any act or omission, negligent or otherwise, on the part of the Contractor to its Subcontractors, or to persons directly or indirectly employed by them, and in any way associated with the performance of the Contract.

43.3 In those jurisdictions where permitted by local law, the Contractor shall also indemnify and save harmless the Owner and anyone to whom the Owner may be liable and, at the Owner's request, to defend on the Owner's behalf, against all costs, liability, and expenses for personal injuries, including death resulting therefrom; and against all costs, liabilities, and expenses for property damage (including attorney's fees and other costs of defense), caused or alleged to have been caused by the concurrent negligence of the Contractor, or its Subcontractors, or persons directly or indirectly employed by them, and in any way associated with the performance of the Contract.

43.4 In those jurisdictions where Paragraph 43.3 above is unenforceable under local law, the Contractor shall agree with the Owner that Paragraph 43.3 is separable and severable from Paragraphs 43.1 and 43.2 and from all other provisions of the Contract, and that Paragraph 43.3 does not constitute the main or essential feature of the Contract and that the obligations of indemnification assumed by the Contractor under Paragraph 43.2 shall remain in full force and effect.

### 44.0 GOVERNING LAW

44.1 The Contract shall be construed and enforced, and all rights and liabilities hereunder shall be determined in accordance with the laws of the State of Utah.

### 45.0 CONTRACTOR'S GENERAL GUIDELINES

#### 45.1 General

45.1.1 All persons, lunch containers, and vehicles entering property are subject to search. Refusal may be grounds to deny entrance or exit from Mercur Mine property.

45.1.2 Alcoholic beverages, narcotics, or any other mind altering substances will not be tolerated on property.

45.1.3 No weapons are allowed on Mercur Mine property. Weapons will be confiscated by the main gate guard and placed in a temporary custody locker for safe keeping.

45.1.4 Persons and vehicles are expected to comply with all traffic rules and speed limits while on Mercur Mine property.

45.1.5 Contractors must furnish the main gate a current list of all employees, including foremen.



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 45.2 Parking - Contractor Employees

- 45.2.1 All employees driving private vehicles must park in the west area of the parking lot, marked Contractor Parking. Workers on the tails project may park at the staging area in Reservation Canyon.
- 45.2.2 It will be the responsibility of the Contractor and his/her employees to make sure that all equipment is properly stored, locked up, and/or put away.
- 45.2.3 Contractors are required to furnish the main gate a copy of authorized signatures for the use of official documents, i.e., removal permits and bills of lading.

### 45.3 Safety Introduction and First Aid.

#### 45.3.1 Safety Introduction

- 45.3.1.1 Safety is a number "1" priority at Mercur.
- 45.3.1.2 All contractors and employees are required to attend a safety orientation, sponsored by the Mercur Mine, prior to working at Mercur. These meetings can be scheduled with the Safety Department one week in advance. Meetings will take approximately 1½ hours.
- 45.3.1.3 All contractors are required to wear safety glasses, boots, and/or other equipment required as determined by the type of job. These safety items are to be provided by the Contractor.
- 45.3.1.4 All contractors are to present a copy of their MSHA number to the Safety/Security Supervisor, to be kept on file.

#### 45.3.2 First Aid

- 45.3.2.1 Contractors are required to provide first aid for their employees. If the need arises, Mercur has EMT qualified people on site who can assist in an emergency.
- 45.3.2.2 If it is determined by an EMT that further medical treatment is necessary, it will be the responsibility of the Contractor to provide transportation, unless the situation is life threatening.
- 45.3.2.3 The first aid station is located at the main guard station.
- 45.3.2.4 The Mercur emergency phone number is 444. The main guard station phone number is 314.

### 45.4 Respiratory Protection

Several rock types are processed at the Mercur Mine. These include highly siliceous beds, which may be in the mine or mill stream at any time. The

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

potential for overexposure to free silica is likely for a number of job tasks. Engineering controls for all potential exposure areas are impractical for silica as well as other airborne contaminants.

Therefore, the following operations policy will be enforced. This is an effort to ensure that maximum contaminant protection is afforded to all personnel at the Mercur Mine. Personnel denotes employees of Barrick and all contractors, consultants, vendors, etc.

- 45.4.1 All existing ventilation or air pollution control equipment shall be kept in proper operating condition.
- 45.4.2 Supplemental ventilation, i.e., portable fans, doors, roof louvers, etc., shall be used whenever possible to minimize exposure to the worker or fellow personnel.
- 45.4.3 Barrick will make available to all personnel either disposal or re-usable respirators, depending upon job task and/or contaminant concentration.
- 45.4.4 One must be clean shaven to achieve a proper respirator fit. Beards and/or moustaches will be allowed because respirators are not required to be worn for the majority of job locations at Mercur.

Specific work areas, as listed below, will require personnel working in these areas to be clean shaven:

- All Laboratory Areas
- Bullion Areas

Additionally, any location on Mercur property under MSHA citation requiring respiratory protection, will dictate that those personnel working in that area to be clean shaven.

Personnel entering areas for short time periods where the use of respirators is required, may be required to be clean shaven, depending upon contaminant, job task, and time spent in the area.

Under no circumstances shall self-contained breathing apparatus (Scott Air-Pak) be worn by any personnel with more than 24 hour facial hair growth (beards).

- 45.4.5 A respirator usage table shall be made available to all personnel. Said table shall provide, in detail, all respiratory protection information for the Mercur Operations.
- 45.4.6 All individuals, including contractor personnel, entering an area under MSHA citation must be clean shaven and equipped with the proper respiratory equipment.
- 45.4.7 Barrick personnel shall provide health and hazard recognition training to all contractors, vendors, consultants, etc., who, at any time, will enter the process

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

facilities. Process facilities are all areas except the Administration Office Building and the Visitor's Center.

### 45.5 Accident Reporting and Evacuation Procedures

#### 45.5.1 Accident Reporting

45.5.1.1 Any time there is an accident, regardless of how minor it may seem, the Contractor must notify the Safety Department (ext. 315) or Security (ext. 314), so that proper measures can be taken.

#### 45.5.2 Evacuation Procedures

It will be the responsibility of the Supervisor/Foreman in charge to make the decision to evacuate, and where personnel should meet. This will vary on several conditions, i.e., weather, location, and extent of involvement of the area. If possible, evacuation should be directed to one location that is familiar to everyone.

### 45.6 Fire and Chemical Hazards

#### 45.6.1 Emergency Procedures for Fire and Chemical Hazards

45.6.1.1 Exposures to several types of fires and chemicals could be harmful or fatal. If you witness an accident that could involve a life threatening atmosphere:

- a. Do not expose yourself to the situation.
- b. Evacuate the area, get help. Post a person so that other people do not enter the area inadvertently.
- c. Use proper protective equipment.

45.6.1.2 When reporting fires or chemical hazards, contact the following:

- a. Fire protection personnel (ext. 314).
- b. Safety Department (ext. 315).

45.6.1.3 Fire fighting at Mercur is accomplished by several methods. Following is an outline of our procedures.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

Class A fires (ordinary combustibles) are extinguished with water from the fire hydrants located in the small red buildings, numbered 1-12. Inside these buildings are the following items:

- 2 ea. 50' x 4" Hoses
- 2 ea. 50' x 1½" Hoses
- 1 Reducer
- 2 Nozzles
- Hydrant Wrench
- Fire Axe
- Flashlight

Also, there are fire hoses located in various places in the Mill Building and CIL Building. It is advisable that all employees locate and make mental note of these areas near where they will be working.

Class B fires (flammable liquids i.e., gasoline, oil, diesel, etc.) can be extinguished with the use of portable fire extinguishers located at various areas in and around the plant. It is also advisable that all employees locate and make mental note of these. These extinguishers are also rated for Class A and C (electrical fires).

These extinguishers are the ANSUL dry chemical type (Co<sub>2</sub> cartridge). To use these: remove hose, break seal, and hold nozzle in safe direction. Charge by pushing on the lever marked "Press." Aim nozzle at the base of the fire, and use a sweeping motion from about 10 feet away, while depressing trigger on nozzle. Located in the electrical equipment rooms are large liquid Co<sub>2</sub> extinguishers. These can be identified by the large nozzle. To use these: aim nozzle at the base of the fire and squeeze the valve at the top of the extinguisher.

These liquid Co<sub>2</sub> extinguishers are rated for Class B and C fires only. These are located only in the electrical equipment rooms and access to these areas is limited to authorized personnel only.

Contractors are required to furnish their own fire extinguishers and service, but in the event of an emergency, when a Barrick extinguisher is used, it must be taken to the main guard station and exchanged for a good one, and logged on the clipboard in the ambulance bay.

In the event of an emergency rescue operation in smoke or toxic gases, there are seven Scott self-contained breathing apparatuses on the plant. These should only be used by people trained in their operation. These are located in the following areas: two in the furnace room under the bullion area, two in the safety shed by the chlorine tank, one in the mill maintenance shop, one in the bullion area, and one at the water chlorinator.



## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

In the event that any of these are used, they must be taken to the main guard station for cleaning and tank exchange.

If there are any questions regarding fire fighting equipment and/or procedures, please inquire at the main guard station.

### 45.6.1.4 Chemical Hazards

Following is a list of the major chemical compounds which are used at the Mercur Mine. They are listed by category and usage area.

<u>Material</u>	<u>Mine</u>	<u>Mill</u>	<u>Dump Leach</u>
-----------------	-------------	-------------	-------------------

#### Fuels/Lubricants

Anti Freeze	X	X	X
Diesel, No. 2	X	X	X
Gasoline	X	X	X
Hydraulic Oil	X	X	X
Motor Oil	X	X	X
Oxygen (Liquid)		X	
Propane (LPG)			X
Transmission Oil	X	X	X
Waste Oils	X		

#### Reagents

Bleach		X	
Caustic		X	
Chlorine		X	
Lime		X	X

<u>Material</u>	<u>Mine</u>	<u>Mill</u>	<u>Dump Leach</u>
-----------------	-------------	-------------	-------------------

Nitric Acid		X	
Sodium Cyanide		X	X

#### Blasting Agents

Ammonium Nitrate	X
------------------	---

Trace amounts of the reagents will be entrained in the tails. The most significant will be the sodium cyanide, which can be expected in quantities of 10-100 ppm. Consumption of tails water could be fatal. Immersion is inadvisable, and thorough cleansing with fresh water is recommended.

Sodium cyanide concentrations of 50-200 ppm can be expected on the dump leach. Any ponded solutions should be entered only if necessary and with appropriate rubber footwear.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

### 45.7 Identification Badges and Vehicle Permits

45.7.1 Identification badges will be required of all contractor employees entering the property. These badges will be issued by the main gate guard.

45.7.2 Lost badges will be reported to the main gate guard at the earliest opportunity after the loss has been discovered.

45.7.3 Private vehicles to be driven beyond designated parking areas must be issued a contractor parking permit. These are issued by the main gate guard.

45.7.4 Contractors are asked to limit company vehicles on property. An unmarked company vehicle that requires access into the project will be required to:

- a. Be issued a temporary vehicle permit.
- b. Receive a numbered cone, daily.
- c. Be logged in at the main gate, daily.

Contractors with visibly marked vehicles (company logo's) will be required to:

- a. Be issued a temporary vehicle permit.
- b. Be logged in at the main gate, daily.

### 45.8 Traffic Patterns and Rules

Heavy rolling equipment is used throughout the mine site. Many of the units are off-road vehicles. To accommodate the visibility restrictions of some of the equipment, two traffic patterns are used.

Conventional right hand traffic is employed in the mill yard and around the shop and office buildings. This also extends to small mill service roads which have insufficient width for haul trucks.

Left hand traffic is posted for all other roads. This is throughout the mine, including dump leach loading routes and all tails access routes.

45.8.1 No service equipment, including pickup trucks and other passenger vehicles, will pass moving haulage trucks.

45.8.2 Haulage traffic will give right of way to service vehicles (dozers, graders, loaders) working on roads.

45.8.3 Light vehicle drivers should insure they maintain a safe interval between their vehicle and the haul truck they are following. Be prepared for spillage, especially on uphill grades.

## II. GENERAL TERMS AND CONDITIONS FOR CONSTRUCTION CONTRACTS

45.8.4 Pickups may pass service equipment if that equipment is travelling very slowly and if adequate visibility and sufficient clear road exists for a safe pass.

### 45.9 Restricted Areas:

Contractors are required to stay in their designated working areas only. Exceptions will only be made by authorized personnel.

### 45.10 Removal Permits

45.10.1 Contractors bringing in equipment such as welders, etc., should have been clearly marked.

45.10.2 Vehicles containing property leaving the site will be checked for a removal permit. A removal permit can be obtained at the main gate and must be signed by an authorized supervisor.

45.10.3 If an individual does not have a removal permit, the item/s will not be allowed off property.

### 45.11 Environmental Concerns

Environmental degradation must be minimized. This includes a number of areas, some of which are listed below:

45.11.1 The disposal of job site refuse must be coordinated through the Contractor's Mercur Supervisor or the Environmental Engineer. The Contractor may haul material to the mine's waste landfill.

45.11.2 No burning is permitted. Moderate to high fire dangers predominate in the surrounding vegetation. Fires in or near the plant cannot be tolerated.

45.11.3 Absolutely no dumping of waste or surplus petroleum products or cleansing agents is permitted. These materials must be disposed of off-site in coordination with the Contractor's Mercur Supervisor or Environmental Engineer.

**RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION  
BARRICK MERCUR GOLD MINE  
STANDARD PAYMENT CONTROL PROCEDURES  
CONTRACT**

The following procedures shall be strictly complied with for the measurement and payment of earnings for work performed by the Contractor:

1. **PROGRESS PAYMENT CERTIFICATE:** Promptly following award of the Contract, the Engineer will transfer all of the Contract data relative to prices from the Contract Documents to the Progress Payment Certificate (Exhibit B). Unit prices and rates will then be recorded by the Contractor against each item on a quantity-in-place basis until there is not further work to be performed against the pay item. Progress earned each pay period against a lump sum amount will be recorded on the payment certificate on a percentage-of-work completed basis until 100 percent of the lump sum amount has been attained. If a lump sum amount in the Contract is too large to be charged against individually, it will be divided into smaller segments against which percentage estimates of progress can then be expressed more realistically. When all work on all pay items is complete and Final Acceptance has been concluded, the Contractor shall mark the certificate "FINAL."
2. **MEASUREMENT OF EARNINGS:** The Contractor shall appoint a qualified representative to reach a mutual agreement with the Engineer on the quantities or percentages of the Work completed. This representative shall be responsible to establish a system of daily forms to monitor labor hours, equipment time, and quantities as necessary to ensure optimum accuracy in preparation of the certificate. The Contractor shall maintain, in a professional manner, all records and drawings used to measure the Work and to compute earnings. The Contractor shall make this data available in event of audit by the Owner or other authorities. The methods used for measurement will be equitable to both parties and, as necessary, will be supported by supplier's invoices, certified weight-slips, marked drawings, calculation sheets, surveys, or photographs. New Work added by Contract Amendment will be added to the Contractor's Progress Payment Certificate as it becomes official and earnings will then be computed as appropriate for the prices established in the Contract Amendment.
3. **EXECUTION OF PAYMENT:** The contract earnings will be paid at a rate which bears the same proportion to the total contract price as the work installed at the site bears to the total Work included in the Contract. Payments will be subject to the terms of payment set out in the Contract Agreement and the General Terms and Conditions. The Contractor's invoice shall be submitted in a form as approved by the Engineer and shall be accompanied by a certified and approved Progress Payment Certificate. At the request of the Engineer, the Contractor shall present a partial or final lien release prior to payment of the invoice. Contract earnings may be computed by-weekly or monthly as appropriate to the circumstances and as approved by the Owner.
4. **PAYMENT LIMITATION:** Total payment to the Contractor shall not exceed the total contract price stated in the Contract Agreement, or a duly executed Contract Amendment. If the Work has been performed against an estimated total contract price rather than a fixed lump sum amount, final payment will not be made to the Contractor until the Owner and the Contractor have executed a Contract Amendment to establish contractual agreement on the final total contract price.
5. **SUBMITTAL OF REPORTS:** The Contract Specifications may require that certain daily, weekly, or monthly reports and forecasts be submitted by the Contractor. The Engineer shall have the right to request submittal of any past due report or forecast with the invoice, or to withhold approval of payment of any invoice until the Contractor is current with all such contract control requirements.



**RESERVATION CANYON TAILING IMPOUNDMENT  
EXPANSION PROJECT**

**BARRICK MERCUR GOLD MINE**

# PROGRESS PAYMENT CERTIFICATE

CERTIFICATE No. \_\_\_\_\_  
SHEET \_\_\_\_\_ OF \_\_\_\_\_  
PREPARED DATE: \_\_\_\_\_  
COVERING PERIOD OF: \_\_\_\_\_  
TO \_\_\_\_\_

(COMPANY) \_\_\_\_\_ (CONTRACT No.) \_\_\_\_\_

(CONTRACT TITLE)

[illegible]

(To Be Prepared Under  
Contractor's Letterhead)

Exhibit C

**CONTRACTOR'S INVOICE FORM**

Invoice No. \_\_\_\_\_

Date: \_\_\_\_\_

The Contractor certifies that the account and items of account to which payment of this invoice shall apply  
is Contract No. \_\_\_\_\_

Reservation Canyon Tailings Impoundment Expansion, covering work performed at the Barrick Mercur Gold  
Mine. (Utah Contr. Lic. Law 58-23-14.5).

For:

Period Ending \_\_\_\_\_, 19 \_\_\_\_\_

	<u>This Period</u>	To	<u>Date</u>
Base Contract	-		
Contract Amendments	-		
	_____		_____
Total	\$ _____		_____

Less: \_\_\_\_\_ % Retained: \_\_\_\_\_

Balance: \_\_\_\_\_

Less Previous Payments: \_\_\_\_\_

\* Balance Payable: \_\_\_\_\_

\*Lien release in this amount is enclosed herewith.

**AFFIDAVIT, AGREEMENT, RELEASE, AND WAIVER OF LIEN**  
**(Final Release Form)**

STATE OF )  
 ) SS  
COUNTY OF )

\_\_\_\_\_, being first duly sworn,  
(name of affiant)

says that: He is the \_\_\_\_\_  
(capacity)

(the "Company") and is authorized to bind the Company by this instrument.

He is familiar with the Company's performance and action in connection with the

Contract No. \_\_\_\_\_, dated \_\_\_\_\_, 19\_\_\_\_

between the Company and Barrick Mercur Gold Mine (the "Owner").

He was investigated the matter and, to the best of his knowledge, the Company has properly and completely performed all services and furnished all materials required by the Contract and, on behalf of the Company, warrants that it has done so.

To the best of his knowledge, and on behalf of the Company, he warrants that the Company has paid in full for all services and materials and has settled all claims for which payment is or will be due and owing.

To the best of his knowledge, and on behalf of the Company, he warrants that no one has any right to file or to enforce a lien on account of furnishing such services or material. On behalf of the Company, he agrees that, in consideration for agreement by Owner to pay the sum of \$ \_\_\_\_\_ as final payment under the Contract, the Company does hereby, for itself and for all who furnish or furnished any services or materials in connection therewith, waive and release any and all rights to file liens and to assert any and all claims, against the Owner, or its subsidiaries, and affiliates, and the property of any of them; and that, if any such claim is asserted or lien is filed or enforced, the Company shall indemnify and save harmless the Owner, and its Engineer, parents, affiliates, and subsidiaries, from any loss, damage, or expense arising therefrom including court costs and attorney's fees.

Acceptance of this form and final payment by the Owner shall not be deemed to release the Company from any Contract obligations.

(Signature of Affiant)

On his behalf and on behalf of the Company.

**Certification of Notary:**

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

**AFFIDAVIT, AGREEMENT, RELEASE, AND WAIVER OF LIEN**  
**(Partial Release Form)**

STATE OF     )  
                  ) SS  
COUNTY OF   )

\_\_\_\_\_, being first duly sworn,  
(name of affiant)

says that: He is the \_\_\_\_\_  
(capacity)

of \_\_\_\_\_  
(the "Company") and is authorized to bind the Company by this instrument.

He is familiar with the Company's performance and action in connection with the  
Contract No. \_\_\_\_\_, dated \_\_\_\_\_, 19\_\_\_\_  
between the Company and Barrick Mercur Gold Mine (the "Owner").

He was investigated the matter and, to the best of his knowledge, the Company has properly and completely performed all services and furnished all materials required by the Contract through \_\_\_\_\_ 19\_\_\_\_ and, on behalf of the Company, warrants that it has done so.

To the best of his knowledge, and on behalf of the Company, he warrants that the Company has paid in full for all services and materials and has settled all claims for which payment is, or will be due and owing as of the date of submission of this form.

To the best of his knowledge, and on behalf of the Company, he warrants that no one has any right, as of the date of submission of this form, to file or to enforce a lien on account of furnishing such services or material. On behalf of the Company, he agrees that, in consideration for agreement by the Owner to pay the sum of \$ \_\_\_\_\_ as partial payment under the Contract, the Company does hereby, for itself and for all who furnish or furnished any services or materials in connection therewith, waive and release any and all rights with respect to matters arising prior to the date mentioned in the preceding paragraph to file liens and to assert any and all claims against the Owner, or its parents, subsidiaries, and affiliates, and the property of any of them; and that, if any such claim is asserted or lien is filed or enforced, the Company shall indemnify and save harmless the Owner, and its Engineer, parents, affiliates, and subsidiaries, from any loss, damage, or expense arising therefrom including court costs and attorneys' fees.

Acceptance of this form and final payment by the Owner shall not be deemed to release the Company from any Contract obligations.

\_\_\_\_\_  
(Signature of Affiant)

On his behalf and on behalf of the Company.

Certification of Notary:

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.



**BARRICK MERCUR GOLD MINE**

Contractor: \_\_\_\_\_

Contract No. \_\_\_\_\_

Originator: \_\_\_\_\_

Authorization No. \_\_\_\_\_

Project Control Approval: \_\_\_\_\_

Change Agreement No. \_\_\_\_\_

1. The work described below is authorized for the compensations as indicated below.
2. The Contract price, completion date, and all other terms, conditions and provisions are not affected by this authorization except as expressly provided herein.

Signed for and on behalf of

Signed for and on behalf of

Contractor \_\_\_\_\_

**Barrick Mercur Gold Mine**

Sign \_\_\_\_\_

Sign \_\_\_\_\_

Print \_\_\_\_\_

Print \_\_\_\_\_

Capacity \_\_\_\_\_

Capacity \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

**CHANGE (TITLE):**

The work covered hereby shall be completed by:

Effect on Contract completion date:

Basis of compensation:

**NOTES:**

**DESCRIPTION:**

**BARRICK MERCUR GOLD MINE**

Contractor: \_\_\_\_\_ Contract No. \_\_\_\_\_

Originator: \_\_\_\_\_ Authorization No. \_\_\_\_\_

Project Control Approval: \_\_\_\_\_ Change Agreement No. \_\_\_\_\_

1. This Contract is modified by the Contract Agreement for the compensation as indicated below.
2. The Contract price, completion date, and all other terms, conditions and provisions are not affected by the Contract Agreement except as expressly provided herein.

Signed for and on behalf of

Signed for and on behalf of

Contractor \_\_\_\_\_

**Barrick Mercur Gold Mine**

Sign \_\_\_\_\_

Sign \_\_\_\_\_

Print \_\_\_\_\_

Print \_\_\_\_\_

Capacity \_\_\_\_\_

Capacity \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

**CHANGE (TITLE):**

The work covered hereby shall be completed by:

Effect on Contract completion date:

**NOTES:**

**DESCRIPTION:**

## PROJECT AED RATES

<u>Equipment</u>	<u>Owner's Inventory</u>	<u>Equipment Cost Per Hour</u>
Scrapers:		
CAT 631-C	0	\$105.00
CAT 637-D	0	\$360.00
CAT 651-E	0	\$377.50
CAT 657-E	0	\$470.00
Dozers:		
IH TD25E	4	\$185.00
CAT D9L	0	\$265.00
Graders:		
CAT 12G	0	\$ 96.50
CAT 14G	0	\$135.00
CAT 16G	2	\$182.50
Water Trucks:		
10,000 Gal Car	2	\$180.00
Front End Loaders:		
IH 560	2	\$190.00
IH 570	3	\$332.50
CAT 992C	1	\$397.50
Trucks:		
WABCO 35 ton	0	\$120.00
WABCO 75 ton	2	\$197.50
WABCO 85 ton	7	\$222.50
Backhoes:		
CAT 215B	0	\$ 82.50
CAT 225 SA	0	\$112.50
CAT 245	0	\$297.50
Compactors:		
CAT 815B	0	\$132.50

**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**III. CONTRACT SPECIFICATION**

**FOR**

**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

### III. CONTRACT SPECIFICATION

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### III. CONTRACT SPECIFICATION

#### 1.0 INTRODUCTION

1.1 The Contract Specification shall establish the Scope of Work for the Contract. The Contract Specification applies to the Form of Proposal and is directly supplemental by the following Contract Documents:

- I. Instructions and Information for Bidders
- II. General Terms and Conditions
- IV. Construction Specification
- A. Inspection and Quality Assurance Specification
- B. Surveying Specification

1.2 The report forms and Drawings that constitute a part of the Contract are listed under the final section of this Specification, titled "Attachments."

#### 2.0 SCOPE OF WORK

This Specification covers the furnishing of all of the labor, materials, equipment, supervision, and subcontracted services at the Reservation Canyon Tailings Impoundment necessary to expand the tailings reservoir from the present confinement elevation of 7315 feet to a new confinement elevation of 7330 feet. The construction under this scope of Work includes the raising of the tailing buttress by 15 feet, and the extension of a portion of the impoundment liner to the 7340 foot elevation.

#### 3.0 WORK INCLUDED

The Work shall include, but not be limited to, the following items:

- 3.1 Plan and organize the Work.
- 3.2 Deliver to the Site all of the materials, construction equipment, facilities, and manpower necessary to accomplish the Work within the schedule.
- 3.3 Receive, unload, store, protect, secure, and transport on Site all of the materials and equipment furnished by the Contractor.
- 3.4 Maintain all of the Project equipment in proper working condition.
- 3.5 Provide sufficient control to ensure that all slopes, grades, and alignments are constructed according to design drawings and construction documents.
- 3.6 Clear and grub trees, brush, and other vegetation. Dispose of all of the cleared and grubbed material in an approved manner.
- 3.7 Strip, load, and haul topsoil up to 2,500 feet and place in designated stockpiles.
- 3.8 Drill and blast rock as required.

### III. CONTRACT SPECIFICATION

- 3.9 Construct and maintain all of the temporary and permanent roads required, including dust and drainage control and safety provisions. Up-grade the construction haul roads and associated drainage systems as needed.
- 3.10 Excavate, load, haul, place in temporary stockpiles (if necessary), and place in the embankment, abutment buttress material (Zone VI), to raise the tailing buttress from the 7315 to the 7330 foot confinement elevation.
- 3.11 The final surface, after completion, must be sufficiently sloped to provide for the runoff of any surface water. At no point on the tailing dam crests shall any ponding of water occur at anytime. Runoff on the 7250 bench of the main dam shall be diverted either to the seepage return system or the downstream abutments.
- 3.12 Excavate, fill, contour, and compact the impoundment slopes as necessary to achieve a proper grade and surface for the installation of the tailing pond liner.
- 3.13 Load, haul, place, and compact a clay liner system to extend a portion of the impervious impoundment liner from the 7320 to the 7340 foot elevation of the tailing reservoir.
- 3.14 Evaluate the soils moisture content and local conditions; protect the borrow excavations, haulage excavations, stockpiles, fills, and embankments from the effect of weather, snowfall, and spring runoff; and repair any damage incurred thereby.
- 3.15 Dewater the work areas as may be necessary.
- 3.16 Haul and store water as may be required for pre-wetting, dust control, or other construction purposes. Water for these purposes will be available from the Owner from a stand-pipe near the old mill plant site.
- 3.17 Coordinate with the Engineer to temporarily relocate and protect the tailings discharge and water reclaim systems as necessary to carry out the construction without interrupting tailing disposal operations.

#### 4.0 WORK EXCLUDED

The Work shall not include the following items:

- 4.1 Furnishing and placing of Zone I material.
- 4.2 Performance of primary control surveys.
- 4.3 Installation of geotechnical instrumentation.
- 4.4 Installation of the permanent tailing line system.

### III. CONTRACT SPECIFICATION

#### 5.0 QUALITY CONTROL

- 5.1 Quality control shall be accomplished according to the Contract Documents, Inspection and Earthwork Quality Assurance Specification (Appendix A).
- 5.2 The Contractor shall maintain constant communication with the Quality Assurance Supervisor, and shall be solely responsible to assure that all of the Work is performed in accordance with the Drawings and Specifications.

#### 6.0 LANDSCAPE AND FACILITY PRESERVATION AND POLLUTION CONTROLS

- 6.1 The Contractor shall exercise care to preserve the natural landscape and shall conduct its operations so as to prevent unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work. The movement of crews and equipment over routes provided for access to the Work shall be performed in a manner to prevent damage to grazing land or property.
- 6.2 The Contractor shall comply with all of the applicable Federal and State laws, orders, and regulations concerning the control and abatement of water pollution.
- 6.3 The Contractor's construction activities shall be performed using methods which will prevent the entrance or accidental spillage of solid matter, contaminants, debris, and other pollutants and wastes into streams and watercourses, or tailing liquids.
- 6.4 No waste waters from aggregate processing or other construction operations shall enter the streams, watercourses, or other surface waters without the use of such turbidity control methods as settling ponds, gravel-filter entrapment dikes, approved flocculating processes, recirculation systems, or other approved methods which are not harmful to fish.
- 6.5 The Contractor shall not disturb the existing impoundment liner, pipelines, fences, powerlines, roadways, or other improvements; and shall immediately repair any damage and make restitution, to the satisfaction of the Owner.

#### 7.0 SCHEDULE THE WORK

- 7.1 The completion of the following items of the Work on the dates indicated shall be a requirement of the Contract. The Contractor shall furnish sufficient manpower, equipment, and supervision; and shall work the necessary hours, including overtime as necessary, to complete the Work to meet the Owner's requirements for Final Acceptance not later than the following dates:

<u>DESCRIPTION</u>	<u>COMPLETION DATE</u>
Construction of main buttress to confinement elevation 7330 feet.	September 30, 1995
Construction of the levee buttress to confinement elevation 7330 feet.	August 30, 1995

### III. CONTRACT SPECIFICATION

Extension of tailing  
pond liner to elevation  
7340 feet.

August 30, 1995

7.2 The Contractor, during preparation of the Bid, shall satisfy itself that it has planned and scheduled the Work to the degree necessary to fairly price the Work. Planning and scheduling shall include the possible effects of weather, subsurface geology, other contractors, confined spaces, and the remote Site. Requests for changes due to the failure of the Contractor to adequately plan and schedule the Work will not be considered.

7.3 The Contractor shall utilize accepted, effective scheduling techniques throughout the course of the Work. The Engineer will request periodic meetings with the Contractor to review the Contractor's progress, manpower, deliveries, and future planning.

#### 8.0 MATERIALS FURNISHED BY THE CONTRACTOR

The Contractor shall furnish all of the materials and equipment necessary to complete the Work.

#### 9.0 MATERIALS FURNISHED BY THE OWNER

The Owner will provide water from a standpipe approximately 2 miles distant by road.

#### 10.0 MATERIAL CONTROL

10.1 The Contractor shall be responsible for the total handling of all of the materials which the Contractor will install at the Site. These materials will include materials provided by the Owner and materials provided by the Contractor.

10.2 The Contractor shall be totally responsible for all of the Project equipment from the point of unloading from transport at the Site to the Final Acceptance of the Work, including formal receiving, inspection, documentation, carloading, handling, storage, and protection.

10.3 The Contractor shall be responsible for the storage, handling, and installation of all materials until such time as each piece is formally transferred to the Owner after installation, inspection, and the Final Acceptance.

10.4 The Contractor shall be responsible for the cost of replacement or repair of any materials accepted by the Contractor that are lost, stolen, or damaged.

10.5 No equipment or materials shall be removed from the Site unless accompanied by an approval signed by the Owner.

#### 11.0 REPORTS REQUIRED FROM THE CONTRACTOR

##### 11.1 Work Schedule

11.1.1 The Contractor shall provide the Engineer with a proposed work schedule for the Work within fourteen (14) calendar days after the award of the Contract. After review and approval of the proposed work schedule by the Engineer, the schedule shall be binding on the Contractor and shall be changed only in conformance with the provisions of the Contract.

### III. CONTRACT SPECIFICATION

- 11.1.2 The work schedule shall be in the form of a time-scaled logic diagram and shall be in sufficient detail, showing construction, procurement activities, equipment, and completion dates in the field, erection, and assembly, to meet the requirements of the Work.
- 11.1.3 The Engineer may require the Contractor to submit, for approval, supplemental schedules detailing specific operational changes in the schedule of the Work.

#### 11.2 Other Reports

- 11.2.1 The Contractor shall provide the Engineer with the following reports at the times indicated. All reports must be submitted in a timely manner as a requirement for approval of the monthly progress payment.

<u>REPORT</u>	<u>SUBMITTED</u>
Contractor's Monthly Safety Statistics	Monthly
Contractor's Daily Report	Daily
Daywork Report (for changes or extras)	Daily
Manpower Report	Weekly
Bar Chart Schedule (Design & Construction)	Every two weeks
Material Receiving Report	As necessary
Inspection Notice	As necessary
Contractor's Sales and Use Tax Statement	Monthly
Contractor's Progress Payment Certificate	Monthly
Contractor's Invoice for Payment	Monthly
Affidavit, Agreement, Release, and Waiver of Lien	Monthly

- 11.2.2 The Contractor's Monthly Safety Statistics Report (Exhibit A) shall be submitted to the Engineer by the Fifth day of each month.
- 11.2.3 The Contractor's Daily Report (Exhibit B) shall be submitted to the Engineer on



### III. CONTRACT SPECIFICATION

the workday following the work. This report shall indicate any possible delays or changes and shall give a brief summary of the work done. Both the Contractor and Engineer shall sign this report.

- 11.2.4 A Daywork Report (Exhibit C) shall be completed for changed or extra work\* performed by the hour or by unit prices under a Work Authorization. These reports must be filled out completely including rates and extension of costs and submitted for approval by the Engineer each day following the extra work.
- 11.2.5 A Manpower Report (Exhibit D), indicating actual number of personnel performing the Work for the previous week; the hours worked by each employee on each Bid item, and the equipment used by the employee will be indicated. This report shall follow the general format of Exhibit D.
- 11.2.6 A Bar Chart Schedule which shows the order and timing in which the Contractor proposes to execute the Work shall be updated and transmitted to the Engineer every two weeks. The scheduled activities shall correspond to the area designations and bid items listed in the Form of Proposal. For each update, the current physical percentage complete and the schedule forecast percentage shall be shown for each activity. This schedule shall follow the general format of Exhibit E.
- 11.2.7 A Material Receiving Report (Exhibit F) showing Owner-furnished materials received by the Contractor shall be provided by the Contractor as necessary.
- 11.2.8 An Inspection Notice (Exhibit G) indicating readiness for inspection, a punch list of defects, and the defects corrected shall be provided by the Contractor as necessary.
- 11.2.9 The Sales and Use Tax Statement, Progress Payment Certificate, Invoice, and Waiver of Lien are discussed in the Contract Chapter II, General Terms and Conditions for Construction Contracts.

#### 12.0 SITE FACILITIES AND CLEANUP

- 12.1 The Contractor shall furnish suitable security, first aid, and safety facilities as approved by the Owner. The Contractor shall be responsible for the safety of his employees, including first aid on the Site, transportation to and from the doctor, and arrangements for off-Site medical services. The Owner's first aid facilities will be available for emergency needs only.
- 12.2 The Contractor shall furnish all necessary temporary facilities such as toilets, drinking water, electric power, air compressors, lighting, heaters, gang boxes, office trailers, and crew shacks.
- 12.3 The Contractor shall be totally self-sufficient as regards temporary electric power, haulage of water, and storage facilities for construction water.
- 12.4 The Contractor shall keep the Site clean of all debris. Upon leaving any area after completion of the Work, the Contractor shall remove from the premises all rubbish and unused materials, except those materials furnished by the Owner.

### III. CONTRACT SPECIFICATION

#### 13.0 OTHER CONTRACTORS

- 13.1 The Owner may be awarding other contracts on this Project. The Contractor shall fully cooperate with other contractors and carefully fit its work to other work as may be directed by the Engineer. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor.
- 13.2 The Contractor shall arrange the Work and shall store and dispose of materials being used so as not to interfere with the operations of other contractors. The Contractor shall coordinate the Work in an acceptable manner and perform it in a proper sequence to that of other contractors.

#### 14.0 ATTACHMENTS

The following documents are attached to this Contract Specification:

##### 14.1 Reports required periodically from the Contractor

###### Exhibit

- A Monthly Safety Statistics
- B Contractor's Daily Report
- C Daywork Report
- D Manpower Report
- E Bar Chart Schedule
- F Material Receiving Report
- G Inspection Notice

### III. CONTRACT SPECIFICATION

#### 14.2 Drawings and Sketches

<u>Drawing No.</u>	<u>Rev.</u>	<u>Drawing Title</u>
6.95.1		Reservation Canyon Impoundment 1995 Expansion - Material Schedule
6.95.2		Reservation Canyon Impoundment 1995 Expansion - Plan, Sheet 1
6.95.3		Reservation Canyon Impoundment 1995 Expansion - Plan, Sheet 2
6.95.4		Reservation Canyon Impoundment 1995 Expansion - Plan, Sheet 3
6.95.5		Reservation Canyon Impoundment 1995 Expansion - Plan, Sheet 4
6.95.6		Reservation Canyon Impoundment 1995 Expansion - Plan, Sheet 5
6.95.7		Reservation Canyon Impoundment 1995 Expansion - Plan, Sheet 6
6.95.8		Reservation Canyon Impoundment 1995 Expansion - Upstream Buttress Details
6.95.9		Reservation Canyon Impoundment 1995 Expansion - Abutment Details
6.95.10		Reservation Canyon Impoundment 1995 Expansion - Rock Cut & Perimeter Rd
6.95.11		Reservation Canyon Impoundment 1995 Expansion - Liner & Pipe Shelf Details
6.95.12		Reservation Canyon Impoundment 1995 Expansion - East Bay Berm
6.95.13		Reservation Canyon Impoundment 1995 Expansion - Levee Seepage Collection Details

[illegible]

**MONTH**

CONTRACTOR REPORTING	SUPERINTENDENT
MANHOURS (MONTH)	LOSS TIME INJURIES (MONTH)
DAYS LOST (MONTH)	FATALITY(S) (MONTH)

DAYS LOST DURING CURRENT MONTH FOR PREVIOUSLY REPORTED LOSS TIME INJURIES

## NAME OF INJURED

[illegible]

**SUBMITTED BY**

**TITLE**

BARRICK MERCUR GOLD MINES INC.  
MERCUR GOLD PROJECT

Date \_\_\_\_\_

Weather \_\_\_\_\_

Temperature \_\_\_\_\_ A.M.

\_\_\_\_\_ P.M.

Contract No. \_\_\_\_\_

CONTRACTOR'S DAILY REPORT

Distribution:

Const. Manager

Barrick

Contractor

CONSTRUCTION PERSONNEL				
Classification	Number On Site	Hired	Terminated	Total
Foremen				
Equipment Operator				
Mechanic				
Truck Driver				
Laborer				

DAILY CONSTRUCTION DATA			
Items Causing Delays:			
Material Quantities			
Material	Today	Previous Total	Total To Date
GENERAL INFORMATION - COMMENTS			

\_\_\_\_\_  
Contractors Representative

BARRICK MERCUR GOLD MINES INC.  
MERCUR GOLD PROJECT

DAYWORK REPORT  
(To be submitted for approval the following day)

Contract No. \_\_\_\_\_ Contractor \_\_\_\_\_

W/A No. \_\_\_\_\_ Description \_\_\_\_\_

Date \_\_\_\_\_

**LABOR**

NAME	CLASSIFICATION	HOURS	RATE	AMOUNT
TOTAL				

**EQUIPMENT**

DESCRIPTION	HOURS	RATE	AMOUNT
TOTAL			

**MATERIALS**

DESCRIPTION	QTY.	PRICE	AMT
TOTAL			

**SUMMARY**

ITEM	AMT.	ADDN'S	TOTAL
LABOR			
EQUIPMENT			
MATERIALS			

**APPROVALS**

CONTRACTOR \_\_\_\_\_  
Representative

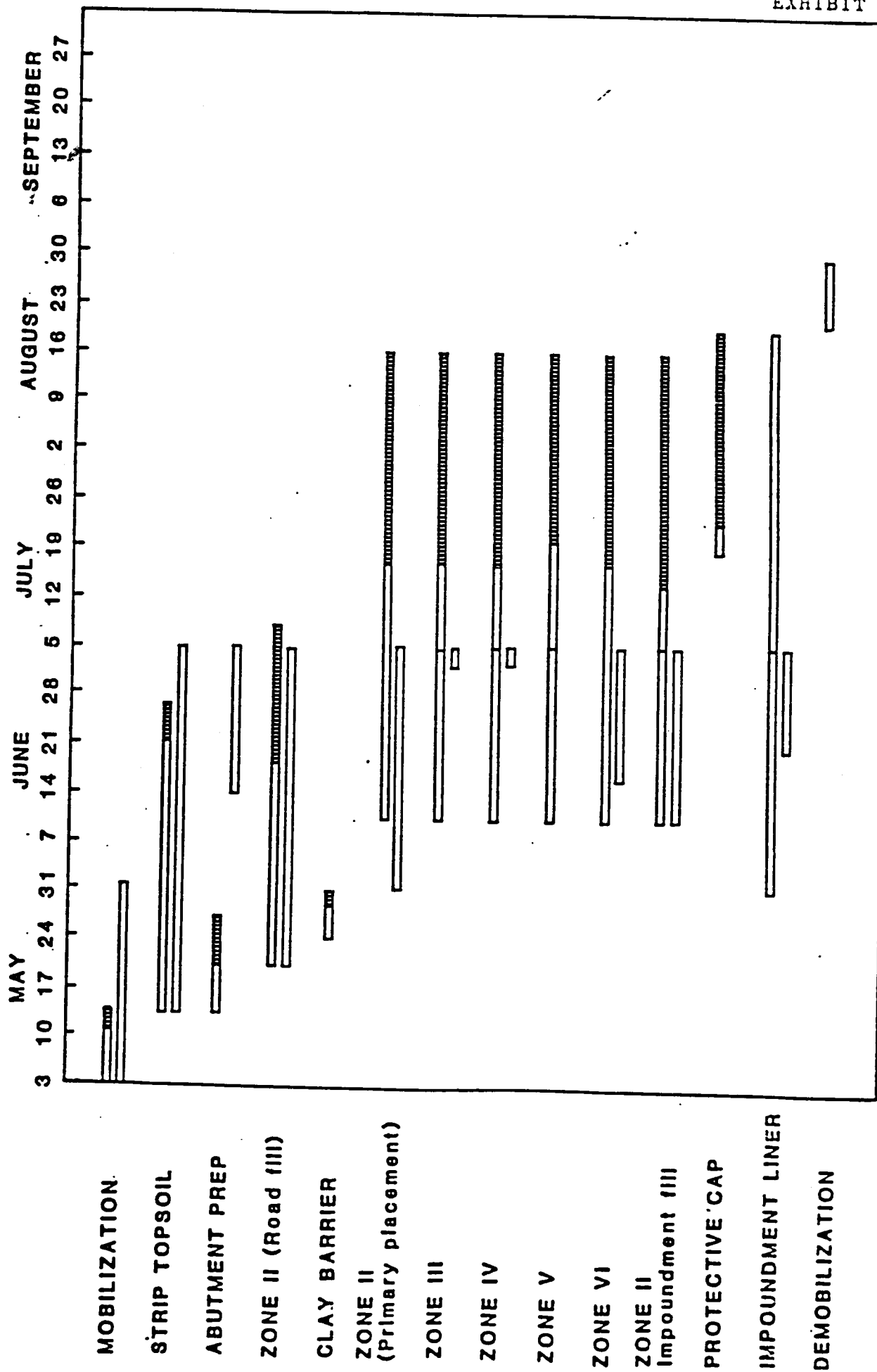
ENGINEER \_\_\_\_\_  
Inspector





# RESERVATION CANYON TAILINGS IMPOUNDMENT

## Project Schedule



## BARRICK MERCUR GOLD MINES, INC

## MATERIAL RECEIVING REPORT

Contractor \_\_\_\_\_ P.O. No. \_\_\_\_\_  
Contract No. \_\_\_\_\_ Date \_\_\_\_\_  
Shipper \_\_\_\_\_ Unloaded By \_\_\_\_\_  
Shipped From \_\_\_\_\_ Received At \_\_\_\_\_  
Shipped Via \_\_\_\_\_ Collect or Prepaid \_\_\_\_\_  
Condition of Shipment: Good Damaged Over Short Partial Complete  
REMARKS: \_\_\_\_\_  
\_\_\_\_\_

ITEM	DESCRIPTION	REC'D	OVER	SHORT	DAMAGED

RECEIVED BY \_\_\_\_\_ DATE REC'D \_\_\_\_\_ ACCEPT BY \_\_\_\_\_  
TITLE \_\_\_\_\_ P.O. No. \_\_\_\_\_

This form is to be submitted by the contractor to request inspection of work considered to be complete. Completed individual equipment check-out sheets (where applicable) must support this notice. After each inspection the completed notice shall be distributed as indicated by the relevant distribution block. The original inspection notice shall be retained by the Owner's Inspector until all punch list items are corrected and the inspection is signed off as final. Hand written notices are acceptable.

INSPECTION NOTICE Contractor The following work has been completed and is ready for inspection in accordance with the terms of the contract:		Contract No:		Distribution Inspection was not final   Inspection was final		
		Inspection Notice No:				
		Inspection was <input type="checkbox"/> final <input type="checkbox"/> Yes <input type="checkbox"/> No				
Inspection requested by Contractor:		First Inspection		Re-Inspections		
Meeting place:				No. 1   No. 2   No. 3		
Date:						
Time:						
				Signatures		
Signatures after defects are listed	Contractors agreement to defects detected at inspection and listed below					
	representative at inspection					
	Owners representative at inspection					
PUNCH LIST OF DEFECTS					Defects Corrected / Yes X No	
1.						

**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**IV. CONSTRUCTION SPECIFICATION**

**FOR**

**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

#### IV. CONSTRUCTION SPECIFICATION

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#### IV. CONSTRUCTION SPECIFICATION

##### 1.0 GENERAL

- 1.1 This Specification covers the construction requirements for the expansion of the Reservation Canyon Tailing Impoundment for the Barrick Mercur Gold Mine as it is indicated on the Drawings and as specified herein.
- 1.2 The State Engineer or a duly authorized representative from the State Engineer's office shall have full authority to inspect the construction at any time.
- 1.3 The Executive Secretary of the Division of Water Quality or a duly authorized representative from the Division of Water Quality, shall have full authority to inspect the construction at any time.
- 1.4 The term 'embankment' is used throughout in general reference to the overall structure. 'Dam' refers to the major portion of the structure below the 7250 elevation and between abutments. 'Upstream buttress' refers to the rockfill buttress placed above the 7250 elevation. 'Abutment buttress' refers to the material on the impoundment side of the clay abutment barrier which supports that barrier and vehicular traffic.

##### 2.0 APPLICABLE CODES AND DEFINITIONS

Except as noted within this Specification, all of the Work shall conform to the documents listed below. These documents are declared to be a part of this Specification the same as if fully set forth herein:

- 2.1 All Federal, State, and County regulations as they apply.
- 2.2 American Society for Testing Materials
  - ASTM C88-83 Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate.
  - ASTM C131-81 Resistance to Abrasion of Small-Size Coarse Aggregate by Use of the Los Angeles Machine.
  - ASTM D421-78 Dry Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants.
  - ASTM D422-72 Particle-Size Analysis of Soils.
  - ASTM D698-78 Moisture-Density Relations of Soil and Soil Aggregate Mixtures Using 5.5-lb Rammer and 12-inch Drop.
  - ASTM D1556-82 Density of Soil in Plan by the Sand-Cone Method.
  - ASTM D1557-78 Moisture-Density Relations of Soils Using 10-lb Rammer and 18-inch Drop.
  - ASTM D2922-81 Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

#### IV. CONSTRUCTION SPECIFICATION

ASTM D4254-83	Minimum Index Density of Soils and Calculations of Relative Density.
ASTM D4318-84	Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
ASTM D1587-83	Standard Practice for Thin Walled Tube Sampling of Soils.
ASTM D5084-90	Triaxial Permeability with Backpressure.

#### 2.3 Department of the Army, Corps of Engineers

CW-02212 "Civil Work Construction Guide Specification," February 1976.

#### 3.0 SUBSURFACE CONDITIONS

The following geotechnical reports have been prepared and are available for inspection at the Mercur Mine office:

- 3.1 Report of Preliminary Tailings Dam Study, Mercur Gold Project, Mercur, Utah; Dames and Moore, October 12, 1981.
- 3.2 Basic Geotechnical Data Report, Reservation Canyon Dam Site, Mercur Gold Project, Tooele County, Utah; Woodward-Clyde Consultants, January 15, 1982.
- 3.3 In-Situ Density Testing, Reservation Canyon Dam Site and Meadow Canyon Dam Site, Mercur Gold Project; Woodward-Clyde Consultants, January 27, 1982.
- 3.4 Preliminary Geological Report, Potential Borrow Sources, Reservation Canyon and Meadow Canyon Dam Sites, Mercur Gold Project, Tooele County, Utah; Woodward-Clyde Consultants, February 10, 1982.
- 3.5 Geotechnical Report, Tailings Dam, Reservation Canyon, Mercur Gold Project; Davy McKee Engineers and Constructors, February 1982.
- 3.6 Preliminary Geology Report, Meadow Canyon Cam and Reservoir, Mercur Gold Project, Mercur, Utah; Woodward-Clyde Consultants, March 1, 1982.
- 3.7 Laboratory Test Results, Reservation Canyon and Meadow Canyon Dam Sites, Mercur Gold Project; Woodward-Clyde Consultants, May 5, 1982.
- 3.8 Data Report-Geologic Mapping and Supplemental Geotechnical Investigation, Reservation Canyon Dam, Mercur Gold Project, Tooele County, Utah; Woodward-Clyde Consultants, August 3, 1982.
- 3.9 Geologic Report for Saddle Dam for Mercur Gold Project, Tooele County, Utah; Davy McKee Engineers and Constructors, August 1984.
- 3.10 Borrow material site map and soils test results from the 1984 Northern Engineering and Testing drilling program.

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- 3.11 Soils Test Results for the Construction of the Reservation Canyon Saddle Dam; Pittsburgh Testing Laboratory, 1985.
- 3.12 Soil Test Results for the 1987 Construction, Reservation Canyon Tailing Impoundment, GARCO Testing Laboratories.
- 3.13 Soil Test Results for the 1988 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.
- 3.14 Soil Test Results for the 1989 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.
- 3.15 Soil Test Results for the 1990 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.
- 3.16 Soil Test Results for the 1991 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.
- 3.17 Soil Test Results for the 1992 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.
- 3.18 Soil Test Results for the 1993 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.
- 3.19 Quality Assurance Monitoring, Liner Test Pad; Rolla Geotechnical Consultants, Inc., February 15, 1994. Report submitted to the Barrick Mercur Gold Mine.
- 3.20 Soil Test Results for the 1994 Construction, Reservation Canyon Tailing Impoundment; GARCO Testing Laboratories. Report submitted to the Barrick Mercur Gold Mine.

#### 4.0 CLEARING, GRUBBING, AND TOPSOIL REMOVAL

- 4.1 The area to be occupied by the permanent construction required under these Specifications and the surfaces of all borrow pits shall be cleared and grubbed of all trees, stumps, roots, brush, and other detrimental materials, as determined by the Engineer.
- 4.2 Topsoil from the abutment, borrow, or impoundment areas shall be stored in zones designated by the Engineer. Removed combustible material shall be removed from construction areas and stockpiled in locales adjacent to the topsoil storage locations for future burial or incineration.
- 4.3 Payment for clearing and grubbing shall be on the basis of surveyed surface area. Payment for topsoil removal will be on the basis of surveyed topsoil stockpile volumes.

#### 5.0 BORROW SITES

- 5.1 The materials required for buttress, barrier, liner and impoundment slope construction shall be obtained from the borrow areas adjacent to the impoundment and the quarry. The Owner shall maintain a stockpile of material suitable for use as liner material and abutment barriers at the Contractor's laydown area.

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- 5.2 The type of equipment used and the excavation of material in the borrow areas and quarry shall be appropriate to produce the required uniformity of mixture of each of the types of materials specified.
- 5.3 The Contractor shall perform selective excavation of the borrow, stockpile, and quarry material, as required by the Engineer.
- 5.4 The Contractor shall be prepared to screen borrow and stockpile materials as necessary, as directed by the Engineer, to achieve the specified material quality.
- 5.5 The location and extent of all borrow pits within the borrow areas shall be as directed by the Engineer. The Engineer shall have the right to change the limits or location of borrow pits within the limits of the borrow area in order to obtain the most suitable material.
- 5.6 As far as practical, the borrow materials shall be conditioned in the borrow pit before hauling and placement on the dam or impoundment liner. When moisture is introduced into the soil at the borrow pit, care shall be exercised to mix the material uniformly to produce the required moisture content during compaction. Any excess accumulation of water in the soil shall be avoided. Stockpiled material is to receive the same treatment.
- 5.7 The Engineer will designate the depth of cut in all parts of the borrow areas, and the cuts shall be made to such designated depths. The bottoms and final sidewalls of all borrow cuts shall be appropriately smoothed and contoured such that the impoundment liner can later be installed in the borrow areas.
- 5.8 The location and extent of all excavation within the quarry shall be as directed by the Engineer. The Engineer shall have the right to change the limits of excavation in order to maintain highwall stability and access integrity.
- 5.9 The Engineer will designate the depth of cut in all areas of the quarry, and the cuts shall be made to such depths. The floor of all quarry cuts shall be smoothed for subsequent drilling. The highwall shall be shaped and scaled to minimize degradation and ravelling.

#### 6.0 EARTHEN MATERIALS AND THEIR BORROW SOURCES

- 6.1 The tailing impoundment construction utilizes several material types. There are three types within the impoundment structure.

<u>Zone</u>	<u>Zone Description</u>	<u>Material Description</u>
II	Abutment Buttress	Clayey gravel, sandy gravel and clayey to silty sand.
II	Impoundment Slope Fill	Clayey gravel, sandy gravel and clayey to silty sand.
V	Clay	Clayey silt to silty clay and decomposed shale.

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V	Liner/Barrier (Clay/Shale)	Clayey silt to silty clay and decomposed shale.
VI	Abutment Buttress	Clayey gravel, sandy gravel, boulders, limestone rock, and limestone fragments.
VI	Upstream Buttress	Clayey gravel, sandy gravel, boulders, limestone rock, and limestone fragments.

##### 6.2 Zone II - Abutment Buttress

Zone II abutment buttress material shall consist of clayey gravel, sandy gravel, and clayey to silty sand. The maximum particle size shall be 8 inches. This material shall be obtained both from material in the impoundment area and from screen rejects. This material shall be free of roots, organics, and other detrimental materials.

Payment for this material will be on the basis of surveyed installed volume.

##### 6.3 Zone II impoundment slope fill shall consist of clayey gravel, sandy gravel, and clayey to silty sand. This material shall be obtained from within the impoundment and from screen rejects. This material shall be free of roots, organics and other detrimental materials.

Payment of this material shall be on the basis of surveyed installed volume.

##### 6.4 Zone V - Clay

Zone V material shall consist of relatively soft shale and clay and/or screened material found in the borrow areas. The material for Zone V shall be free of roots, organics, and other detrimental materials. The following are the gradation requirements, as determined by ASTM D421-78 and D422-72.

<u>U.S. Standard Sieve Size</u>	<u>Percent Passing By Weight</u>
6 inches	100
2 inches	100 to 95
3/4 inch	100 to 76
No. 4	100 to 46
No. 30	100 to 34
No. 200	100 to 25

In addition, the Plasticity Index for this material, as per ASTM D4318-84, shall be greater than or equal to 10.

Payment for this material shall be on the basis of surveyed installed volume.

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##### 6.5 Zone V - Liner/Barrier Clay/Shale

Clay shale material for the clay liner and the 2-foot barrier shall be Zone V material screened to meet the following specifications as determined by testing according to ASTM D421-78 and D422-72.

<u>U.S. Standard Sieve Size</u>	<u>Percent Passing By Weight</u>
2 inches	100
3/4 inch	100 to 85
No. 4	100 to 55
No. 30	100 to 35
No. 20	100 to 25

All material shall have a Plasticity Index of 10 or greater, as determined by testing according to ASTM D4318-84.

Payment for this material will be included as part of the liner and or barrier.

##### 6.6 Zone VI - Abutment and Upstream Buttress

Buttress material shall consist of a run of mine fill - predominantly Upper Great Blue limestone from the quarry southwest of the impoundment. Blasted limestone from the Hall Canyon Member within the impoundment limit will also be used as buttress. Mudstone, siltstone, and clayey gravel material may be blended with the rock, provided care is taken to ensure even mixture of added material is achieved and that zoning of this material within the upstream buttress does not occur.

Payment for this material shall be on the basis of surveyed installed volume.

#### 7.0 ABUTMENT TREATMENT

7.1 The abutments shall be excavated to competent material or conditioned with fill, as determined by the Engineer. Prior to the placement of embankment materials, the abutments shall be smoothed and contoured as much as possible.

7.2 The abutment areas shall be graded and properly maintained to ensure adequate drainage at all times. Rainfall, runoff, and groundwater shall be kept drained by ditching, sumping, and pumping or other suitable means. Any depressions or irregularities shall be filled and compacted. Work shall be suspended when the construction surface is wet, muddy, or otherwise in such condition that the area cannot be properly manipulated.

7.3 All excavated material not approved for use by the Engineer shall be disposed of in spoil areas designated by the Engineer.

##### 7.4 Clay Barriers

Seepage through the abutments is retarded by constructing barrier walls. These will consist of liner/barrier clay shale.



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- 7.4.1 The barriers shall be placed in lifts not exceeding 12 inches in loose thickness, and shall be compacted to a minimum of 95 percent of maximum dry density, as per ASTM D698-78. Moisture contents shall be kept to within 0 and +3 percent of the optimum moisture content.
- 7.4.2 The Owner shall provide a supply of clay suitable for use as clay barrier. The material will be screened and delivered by the Owner to a stockpile site, located west of the main dam next to the former contractor's laydown area. The Contractor will be responsible for adding sufficient water to maintain proper moisture content and for the delivery of the clay to the impoundment site.
- 7.4.3 The barrier and liner clay shall have an in-place compacted maximum permeability of  $1 \times 10^{-7}$  cm/sec as determined by testing in accordance with ASTM D5084-90 on samples taken in accordance with ASTM D1587-83.
- 7.5 Abutment Two-Foot Clay Barriers
  - 7.5.1 In those portions of the impoundment where the topographic constrains are too great to permit contouring to a maximum 3:1 slope, a minimum 2-foot wide impervious barrier of clay liner material shall be installed and buttressed with Zone II and Zone VI fill as detailed in the Drawings. This clay barrier shall be contiguous with the impoundment liner to be installed as well as with the existing impoundment liner. Where installed adjacent to the main dam, the clay barrier shall be placed on the dam abutments between the abutments and the upstream buttress. This clay barrier shall connect with the existing barrier and extend upstream from the dam to the impoundment liner. Prior to placing the impervious barrier of clay, the abutment surfaces shall be moistened and compacted by rolling with a tamping roller or hand held vibrating plate tampers.
  - 7.5.2 In some cases, it may be necessary for the Contractor to install a horizontal blanket to provide continuity between the clay layers. This bridging blanket shall be comprised of the clay described above in Subsection 7.5.1.

#### 8.0 BUTTRESS CONSTRUCTION

- 8.1 The selection of all materials for use in constructing the abutment and upstream buttress and the placement of the materials shall be subject to the approval of the Engineer.
- 8.2 The distribution and gradation of material throughout the buttress shall be such that the buttress shall allow the free flow of moisture through the structure.
- 8.3 If, in the opinion of the Engineer, the surface of any lift of rockfill is too smooth to bond properly with the lift of material to be placed thereon, it shall be scarified or ripped, in an Engineer-approved manner, to a sufficient depth to provide a satisfactory bonding surface before the next succeeding lift of rockfill material is placed.
- 8.4 The exposed downstream face of the buttress shall be carefully dressed with a backhoe or other suitable equipment to provide a relatively uniform slope. The Contractor shall take precautions to prevent any damage to the seepage collection system during the



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dressing and sloping operations. Any spillage onto the seepage collection apron will be removed by the Contractor. The Owner will be responsible for the final cleaning of the apron.

- 8.5 The upstream or deposition face of the buttress shall be dressed with a backhoe or other suitable equipment to provide a suitable foundation for the placement of a non-woven geotextile. This geotextile is placed to impede the flow of tailings into the seepage collection system during deposition operations. The Contractor is responsible for preparing a suitable foundation for the geotextile. The Owner is responsible for procurement and installation of the geotextile.
- 8.6 In the event of subsidence in any part of the buttress prior to the Final Acceptance of the Work, the Contractor shall rebuild such portion of the embankment. In the case where it is determined that the subsidence was caused through no fault of the Contractor, the rebuilding of the buttress shall be performed at the applicable contract unit prices for rockfill.
- 8.7 No fill shall be placed over any area where tests are in progress until the tests have been reported and the Engineer has advised the Contractor that it may continue.
- 8.8 Upon completion of the buttress to the 7330 confinement elevation, the Contractor shall complete a safety berm on the downstream crest. The berm will be a minimum 18 inches in height, constructed of selected Zone VI material.
- 8.9 Upon completion of the buttress to the 7330 confinement elevation, the Contractor shall cap the upstream crest with a minimum 25 foot-wide road surface of selected Zone VI material. This cap shall be a nominal six inches in thickness.

#### 9.0 IMPOUNDMENT SLOPE FILL

It will be necessary to place fill in portions of the embankment in order to maintain a maximum 3:1 slope and achieve the planned impoundment liner elevation. The areas requiring fill are identified in construction Drawings 6.95.1 through 6.95.13.

- 9.1 The material to be used as impoundment slope fill will be Zone II fill and will be approved for use in this application by the Engineer.
- 9.2 The distribution and gradation of the material throughout the earthfill shall be such that the fill will be free from lenses, pockets, streaks, or layers of material differing substantially in texture, gradation, or moisture content from the surrounding material. In addition the coarser more pervious materials shall be placed away from the impoundment slopes.
- 9.3 Impoundment slope fill shall be placed in 12 inch lifts, essentially horizontal where possible, maintaining the approximate impoundment slope. The Surveyor shall provide control for the impoundment slope.
- 9.4 No fill shall be placed over any area where tests are in progress until the tests have been reported and the Engineer has advised the Contractor it may continue.

10.0 CLAY/SHALE IMPOUNDMENT LINER

- 10.1 The impoundment clay shale liner shall be built up as follows:

Foundation, Manning Canyon shale or Zone II fill.

Clay liner, 12 inches of clay/shale.

Moisture barrier, 4 to 6 inches of unclassified, uncompacted earthen fill acting as a moisture barrier.

Erosion protection, a single sheet of woven geotextile, AMOCO 2006 or similar.

- 10.2 The selection and placement of all material for the impoundment liner shall be as approved by the Engineer.

- 10.3 Prior to placement of the clay liner, the foundation surface of the impoundment shall be first contoured, smoothed, and shaped in accordance with specifications detailed in the drawings. The minimum preparation required shall be that the foundation surface be properly moistened and compacted using three passes of a heavy smooth vibratory roller.

- 10.4 Two feet of compacted clay/shale shall be placed as foundation, in the event that foundation material is something other than Manning Canyon clay/shale or Zone II fill.

The clay/shale layer shall be placed in two lifts not exceeding 16 inches in loose thickness and shall be compacted as specified in Section 11.

- 10.5 The clay layer of the new liner shall be constructed continuously with the clay layer of the existing liner. To insure this continuity, prior to initiating the installation of new liner in any area of the impoundment, 1 to 2 feet of the existing liner shall be exposed. The new liner will overlap the existing liner as shown in Drawing 6.95.19.

- 10.6 The clay liner will be placed in lifts of sufficient height to ensure a final compacted liner thickness of 12 inches.

- 10.7 In any separate portion of the impoundment being lined, each lift of liner shall be placed such that the material comprising the lift will be uniformly graded and distributed to the degree that the lift will be free from lenses, pockets, streaks, or layers of material differing substantially in texture, gradation, or moisture from the surrounding material.

- 10.8 If, in the opinion of the Engineer, the surface of any lift of liner is too dry or too smooth to bond properly with the lift of material to be placed thereon, it shall be moistened and/or worked with harrow, scarifier, or other suitable equipment, in an Engineer-approved manner, to a sufficient depth to provide a satisfactory bonding surface before the next succeeding lift or liner material is placed.

- 10.9 At no point during the construction of the liner shall any ponding of water be allowed at any time. If, as a result of rainfall or any other cause of excessive moisture, the embankment working surfaces become saturated and are unsuitable, the materials shall be removed from the surface to such depths as may be required by the Engineer to

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expose firm compacted materials before resuming the liner placement and compaction operations.

- 10.10 The Owner shall be responsible for delivering screened liner clay to a stockpile site adjacent to the mixing pad at the Contractor's laydown area.
- 10.11 The Contractor will be responsible for adding moisture to the screened clay prior to delivery to the placement site. A Soils Stabilizing Machine similar to the Bomag 150 MPH, will be used to add moisture to the screened clay. Moisture levels of the conditioned clay in the mixing pad shall be at +3 percent to +4 percent above optimum prior to delivery to the placement site.
- 10.12 The liner will be compacted with a smooth drum vibratory roller to a minimum specification as detailed in Section 11. The Contractor shall target moisture levels in the placed compacted liner clay on the "positive side" of optimum.
- 10.13 The clay liner shall have a Plasticity Index of 10 or greater, as determined by testing according to ASTM D4318-84.
- 10.14 The clay liner shall have a maximum in-place compacted permeability of  $1 \times 10^{-7}$  cm/sec. Liner permeability shall be determined from laboratory triaxial permeability tests ASTM D5084-90 on samples obtained in accordance with ASTM D1587-83.
- 10.15 The following protocol will be used to insure that the in-place liner has a maximum permeability of  $1 \times 10^{-7}$  cm/sec. If the laboratory triaxial permeability is greater than  $1 \times 10^{-7}$  cm/sec, and the field compaction fails, remedial action must be taken. If the laboratory triaxial permeability falls between  $9.02 \times 10^{-8}$  and  $1 \times 10^{-7}$  cm/sec, two additional triaxial tests on specimens, taken from other panels within the control section, are to be conducted. If each of these two tests meet the  $9.02 \times 10^{-8}$  cm/sec criteria, and the field compaction is approved, then the failed test is considered an outlier. If either of the two additional tests do not meet the  $9.02 \times 10^{-8}$  cm/sec criteria or the field compaction fails, then remedial action must be taken.
- 10.16 In the event that remedial action is required the section in question can be scarified, remoistened and recompacted or at the discretion of the Engineer replaced with an additional lift of liner clay. The additional clay lift will be placed after removing the moisture barrier and tested as a new clay liner.
- 10.17 If remedial action is required and the failed liner clay is placed and compacted to the density and moisture specification the Owner will pay for both liner lifts at the contract price. If the moisture content of the placed compacted liner clay is placed and compacted at below optimum moisture then the Owner will only pay for the final approved lift of liner.
- 10.18 No lift shall be placed over any area where tests are in progress until the tests have been reported and the Engineer has advised the Contractor that it may continue.
- 10.19 A moisture barrier consisting of a 4 to 6 inch thickness of unclassified, uncompacted earthen fill shall be placed directly over the clay liner after the results of all liner compaction tests have been received and the liner accepted by the Engineer. The sole purpose of the moisture barrier is to prevent desiccation cracking of the liner during the

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summer months. To this end the Engineer may, depending on weather, request the placement of the moisture barrier prior to receiving the results of the permeability tests.

- 10.20 The relocation and installation of existing pipe lines will be performed by the Owner's mill maintenance personnel. Some of these lines will be laid on a pipe support berm or on the surface of the impoundment liner and it will be necessary for the Contractor to coordinate with the Owner and the maintenance personnel for the temporary relocation of these lines while sections of the impoundment liner are being installed and for the construction of haulageway crossovers.
- 10.21 The geotextile erosion cover will consist of woven geotextile as specified on the Drawings. It will be the Owner's responsibility to ensure that the geotextile is properly installed and secured. The erosion protection sheet will have all seams sewn or secured with appropriate fasteners to minimize wind damage. It shall be anchored according to acceptable standards.

#### 11.0 COMPACTION

Except as approved by the Engineer, the compaction equipment shall comply with the requirements stated in "Civil Work Construction Guide Specification," CW-02212, February 1976, Department of the Army, Corps of Engineers.

All of the following compaction requirements shall be for in-place materials.

##### 11.1 Zone II (Buttress and Impoundment Fill)

Each layer shall be placed in lifts not exceeding 12 inches in loose thickness, and shall be compacted to a minimum of 95 percent of maximum dry density as determined by ASTM D1557-78. Moisture contents shall be kept to within 0 and +3 percent of the optimum moisture content.

##### 11.2 Abutment Clay Barrier

The barrier shall consist of a clay placed in lifts not exceeding 12 inches in loose thickness and compacted to a minimum of 95 percent of the maximum dry density as per ASTM D698-78, with moisture content held to within 0 to +3 percent of the optimum moisture content.

##### 11.3 Abutment Buttress (Zone II and VI)

The Zone II and Zone VI materials to be used to buttress the clay barrier shall be constructed in accordance with the material, placement, and compaction specifications for these materials as constructed elsewhere in the impoundment.

##### 11.4 Zone VI Upstream Buttress

This material will be end-dumped to full lift thickness. An advance method of placement will be used, whereby fully loaded haulage units travel across freshly dumped rock. This will provide sufficient compaction for rockfill. Partial lifts will be used where prudent, for instance, when in contact with Zone II materials. Advance placement will also be used on the partial lifts.

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##### 11.5 Liner Foundation Surface

The foundation surface upon which the liner is to be placed shall be compacted with a minimum of 3 passes of a heavy smooth drum vibratory compactor.

##### 11.6 Clay Liner

Clay liner shall be placed in a compacted lift of 12 inches in thickness. The liner shall be compacted to a minimum of 95 percent of the maximum dry density as per ASTM 698-78 with moisture content held to within 0 to +3 percent of the optimum. Densities and moisture contents shall be made in accordance to ASTM 2922-81 with the probe set at 8 inches.

##### 11.7 Liner Moisture Barrier

The soil moisture barrier placed on top of the liner shall be 4 to 6 inches thick and shall not be compacted.

#### 12.0 SURFACE MONUMENTS & GEOTECHNICAL INSTRUMENTATION

The Contractor shall conduct its operations in such manner that any reference marks or geotechnical instrumentation will not be disturbed or damaged. Any reference mark or geotechnical instrumentation disturbed or damaged due to negligence on the Contractor's part shall be replaced or repaired and the correct horizontal and vertical locations shall be furnished at the Contractor's expense.

#### 13.0 DRILLING AND BLASTING

In the course of construction, it will be necessary to employ drilling and blasting to excavate and grade portions of the more rugged, resistant limestone strata in the abutment and impoundment areas.

13.1 In all cases, the Contractor shall not proceed to drill and blast any ground or rock within the impoundment area without prior specific written approval from the Engineer.

13.2 The Contractor shall adhere strictly to all applicable Federal, State, County, MSHA, and Owner regulations; and shall be solely responsible for the transport, storage, guarding, handling, placement, and detonation of any and all blasting agents.

13.3 All blasting shall be carried out using an ammonium-nitrate-plus-fuel-oil explosive (ANFO), with boosters and primer cord.

The use of any other blasting agents will be allowed only when approved beforehand by the Engineer.

13.4 The use of electricity triggered detonators in blast holes will be permitted only when approved by the Owner in writing.

13.5 Prior to and during the initiation of any blast, the Contractor shall have total responsibility for clearing and securing the blast affected area and for protecting the

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employees, facilities, and equipment of the Owner, the Contractor, and all other contractors or subcontractors.

- 13.6 No blast shall be initiated by the Contractor without the presence of the Engineer or a designated representative of the Engineer, at the Site.

#### 14.0 DEWATERING

- 14.1 In the event that groundwater is encountered in the course of construction, proper dewatering procedures shall be followed.
- 14.2 Prior to beginning work on dewatering the affected area, the Contractor shall submit for approval a plan showing its proposed method. The plan may be placed in operation upon approval by the Engineer, but nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of the system.
- 14.3 The dewatering shall be accomplished in a manner that will result in all of the construction operations being performed in the driest possible state.

#### 15.0 WEATHER LIMITATIONS

- 15.1 In no case shall frozen soils be placed in any portion of the dams or liner system nor shall any fill materials be placed upon any frozen surfaces.
- 15.2 It shall be the Contractor's responsibility to protect the embankments and impoundment liner from freezing. Where required, this may be accomplished with the placement of dry lifts at the end of each day of operation or by other methods approved by the Engineer.

#### 16.0 ACCESS ROADS, HAULAGE ROADS, AND DRAINAGE

- 16.1 The location of all temporary and permanent roads shall be in accordance with Drawing Nos. 6.95.1 through 6.95.13.
- 16.2 A perimeter road will be constructed around the impoundment structure to provide access for operations.
- 16.3 Wherever the perimeter road is constructed on in-situ or Zone II fill material, the roadway shall be constructed of a layer of geotextile (AMOCO 2006 or equivalent), followed by 8 to 12 inches of screened Zone VI as detailed in Drawing 6.95.10.
- 16.4 The perimeter road constructed on Zone VI buttress shall be a minimum of 25 feet wide and have a 6 inch cap of screened Zone VI material. The finished roadway shall have a surface suitable to accommodate light vehicle traffic. The roadway should slope so that run-off will drain into the impoundment.

#### 17.0 GAME FENCE

A section of the perimeter game fence will be relocated as shown on Drawing 6.95.11. Construction of the relocated fence will be similar to the existing fence. The Contractor will supply all equipment and labor required to clear and relocate the fence. The Owner will provide

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all materials and supplies. Fence relocation should be scheduled so that an intact fence is in place at the end of each work day to prevent livestock and large game animals from straying into the impoundment area.

##### 18.0 PUMP STATION

The reclaim pump station north of the rock cut will be reconstructed at the end of construction to accommodate pond water rise. The pump station is constructed of Zone VI buttress material placed over the completed liner. Final configuration of the station will be determined at the time of construction. In addition to excavating, loading and hauling equipment, a track hoe will be required for final contouring. Payment shall be based on rock volume as determined by truck count.

##### 19.0 PIPELINE SUPPORT SHELF

A pipeline support shelf will be necessary to accommodate the various reclaim and make-up water lines. The shelf shall be placed on the moisture barrier and shall extend south from the reclaim pump station. Positive line drainage toward the reclaim station will be provided. The shelf shall be as detailed in Drawing 6.95.11 and is to be constructed of screened Zone VI road surfacing.

##### 20.0 EAST BAY BERM

A berm will be constructed across the mouth of the East Bay. This berm will reduce the active impoundment surface by isolating the East Bay. The impoundment liner will be maintained around the East Bay to the 7340 elevation.

The berm will be constructed on the tails from an estimated tails elevation of 7308 to a finished berm elevation of approximately 7322. A 20 foot roadway will be constructed along the top of the berm providing tailings drop locations across the front of the East Bay. The berm will be constructed of Zone VI buttress material, placed over a geogrid covered with a granular fill and selected quarry rock as shown in Drawing 6.95.12.

The geogrid is to be unrolled directly over the tails with a two-foot overlap between adjacent section of geogrid. Two one-foot lifts of granular fill are to be placed over the geogrid and compacted. A vibratory roller SHOULD NOT be used to compact the fill. Two feet of selected quarry rock is to be placed over the fill. Finally the berm is to be completed to the design elevation using upstream buttress material from the quarry, end dumped, and spread with a D-7 dozer. The Engineer shall approve all material used in construction of the berm.

The Owner will provide the geogrid. The Contractor will provide the labor and equipment required to place the geogrid and all fill material. Payment for transport and placement of the geogrid, the selected quarry rock, and the upstream buttress material shall be based on an as-placed material volume. Payment for the transport and placement of the granular fill shall be billed at hourly day work rates.

##### 21.0 LEVEE SEEPAGE COLLECTION SYSTEM

A levee seepage collection system will be constructed in the reclaim pond area between the levee and the saddle dam. The seepage collection system is designed to collect tailing impoundment seepage from the base of the levee, store the seepage in a controlled environment, and provide a stationary pumping facility to return the seepage to the impoundment. The seepage collection



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system consists of access and service roads, a concrete seepage collection apron, and a concrete seepage collection sump (see Drawings 6.95.12 & 6.95.13).

The Contractor will provide labor and equipment to reshape the downstream side of the levee to a 2:1 slope, construct the north service road, excavate and backfill apron and sump openings, construct the south service road, and top dress the service roads with crushed road surfacing rock. The Owner will be responsible for all concrete, steel, electrical, pump installation, and piping work. The Contractor will be required to work closely with the Owner and/or subcontractors during the course of this construction. Payment for work associated with the seepage collection system will be on a "day work" basis.

**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**V. FORM OF PROPOSAL**

**FOR**

**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**FORM OF PROPOSAL**

TO: BARRICK MERCUR GOLD MINES, INC.

CARE OF: MERCUR GOLD PROJECT  
P.O. BOX 838  
Tooele, Utah 84074-0838  
Attention: Ralph R. Sacrison, P.E.

SUBJECT: PROPOSAL

**RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

The undersigned Bidder certified that it has examined the Invitation to Bid and all attachments listed therein for the above subject Contract; that it has checked all prices shown in this Proposal and understands that the Owner will not be responsible for any errors or omissions made by the Bidder in the preparation of this Proposal.

It is understood that this Proposal constitutes a firm offer which cannot be withdrawn for thirty (30) calendar days after the date specified for the closing of bids. It is further understood that the prices quoted herein will not be subject to any adjustment for escalation.

The Bidder agrees that the Contract Documents included with the Bid, a copy each of which have been furnished to the Bidder by the Engineer, are the basis of this Proposal, and further agrees that, if this Proposal is accepted, said documents shall form part of the Contract between the Contractor and the Owner.

This Proposal acknowledges receipt, understanding, and full consideration of the following addenda:  
\_\_\_\_\_ (if no addenda have been received, state "None").

The undersigned Bidder agrees that, if awarded the Contract, it will commence the Work promptly upon receipt of notice to proceed; it will perform the Work diligently and in accordance with the Contract Documents; and it will fully complete the Work within the agreed time limits.

COMPANY: \_\_\_\_\_ DATE SIGNED: \_\_\_\_\_

\_\_\_\_\_  
BUSINESS ADDRESS: \_\_\_\_\_ BY (SIGN): \_\_\_\_\_  
NAME (PRINT)

\_\_\_\_\_  
PHONE NO. \_\_\_\_\_ TITLE: \_\_\_\_\_

\_\_\_\_\_  
CONTR. LICENSE & CLASSIFICATION: \_\_\_\_\_ COMPANY LEGAL STATUS: \_\_\_\_\_

\_\_\_\_\_  
(CORPORATION, PARTNERSHIP, etc.)

MSHA NO. \_\_\_\_\_

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1.0 PREAMBLE BY OWNER

1.1 A Proposal to be fully responsive must include a price for each item of Section 2.0, Bid Schedule, quoted and a reply to each subsequent section of the Proposal.

1.2 Each fixed lump sum and unit price amount quoted by the Bidder, under Section 2.0, Bid Schedule, will be considered by the Owner to include, without limitation:

All of the costs (as appropriate to the bid item) of labor, supervision, benefits, Workmen's Compensation, taxes, liability insurance, travel, and subsistence (if required); construction equipment, consumable supplies, and permanent materials (as specified); overhead and profit.

1.3 It will also be considered by the Owner that the Bidder has made allowances in its prices for all of the cost requirements of the Contract Specifications, Design Specifications, General Specifications, Drawings, and other Contract Documents.

1.4 Each supplementary and basic unit price will be considered by the Owner to include all of the costs described under Item 1.2 of this Preamble. Whenever a unit price is used to specify charges for work performed, the Owner will consider that the price is all exclusive.

1.5 The rates quoted under Sections 3.0, 4.0, and 5.0 of the Proposal will be used only for work outside of the scope of the Contract and for which a unit price does not exist or cannot be established. Whenever possible, these rates and the supplementary unit prices will be used to negotiate a lump-sum amount. However, on an emergency basis, changed or extra work may be performed on a time-and materials basis using these rates and unit costs under field Work Authorization procedures.

1.6 All of the quantities appearing in the Bid Schedule are approximate only and have been prepared primarily for the comparison of bids. Payment to the Contractor will be based upon the actual quantities performed. The Owner considers that all of the unit prices are firm for the full term of the Contract regardless of any variation between estimated and final quantities.

1.7 Page one of the Form of Proposal provides a space for the Bidder to enter its MSHA number. If the Bidder has not yet obtained an MSHA number, the Bidder shall enter "will apply" to confirm its intent to comply with Section 37.0 of the General Terms and Conditions if awarded the Contract.

1.8 The Bidder shall submit the following attachments with the Proposal:

- I. A complete Staff Organization Chart, including the Executive Manager responsible for the Contract, Project Manager, Field Superintendent(s), and other key employees to the level of General Foreman.
- II. A brief resume for each key employee named on the Staff Organization Chart. The Owner reserves the right to request replacement of any candidate offered.
- III. A detailed Work Schedule showing all of the work categories for each part of the Proposal on which the Bidder has submitted a price. The Schedule, at this stage,

## V. FORM OF PROPOSAL

must include sufficient detail to assure the Owner that the Bidder has completely and accurately thought out the work to be performed.

- IV. A Manpower Schedule or graph coordinated with the above Work Schedule showing the number of laborers anticipated to complete the various categories of work shown on the Schedule.
  - V. An equipment schedule specifying the type, model, and numbers of equipment to be used on completing each of the tasks outlined in Section 2 of the Bid Schedule.
  - VI. A narrative Work Program Plan describing the type and number of equipment units to be used and outlining how the various excavations and fills will be performed, including the impoundment liner.
- 1.9 The measurement of the unit quantities for payment shall be made in accordance with current acceptable survey techniques.
- 1.9.1 The Owner will employ an independent contractor to provide surveying services for the project. The surveying contractor shall conduct a monthly survey and calculate the quantities completed for each item of work. After completion of the survey, the Engineer and the Contractor shall independently review the calculations and determine the quantities completed for payment purposes. These calculated quantities shall be compared and adjusted or recalculated as necessary to arrive at agreed quantities for payment purposes.
  - 1.9.2 The quantities for clearing and grubbing (Bid item 2.2) shall be measured as the area of the surface cleared and grubbed.
  - 1.9.3 The quantities for stripping or excavation shall be measured as the bank volume removed. The bank volume of topsoil removed (Bid item 2.4) shall be calculated by surveying the topsoil stockpiles.
  - 1.9.4 The quantities for embankment, fill, or stockpiling shall be measured at completion of the Work as the embanked volume or the stockpiled volume.
  - 1.9.5 The quantities for the impoundment liner (Bid item 2.12) shall be neatline; that is, measured as the area of the surfaces on which those liners are placed.
  - 1.9.6 The quantities for the clay barriers (Bid items 2.8) shall be measured as the volume of material placed.
- 1.10 Mobilization shall include the transportation and establishment of construction equipment, personnel, job facilities, and supplies onto the Site of the Work. Demobilization shall include the removal of all of the foregoing from the Site and the final cleanup of all work areas.

2.0 BID SCHEDULE

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENSION
2.1	<u>Mobilization</u>	1	Lump Sum		
2.2	<u>Clearing and Grubbing</u> of dam abutment, impoundment, and borrow areas (IV-4.1).	8,000	SY		
2.3	<u>Drilling and Blasting</u> of limestone outcrop, not including excavation. One area is projected for this work (IV-13.0).	54,520	CY		
2.4	<u>Topsoil Stripping</u> including excavating, loading, hauling and placing in designated stockpiles up to 2,500 feet away (IV-4.2).	12,000	CY		
2.5	<u>Perimeter Road Construction</u> includes hauling, placing and grading of geotextile and roadbase material (IV-16.2, 16.3, 16.4)	5,400	FT		
2.6	<u>Roadway Material Stockpiling</u> includes selection and screening of Zone VI material for use in roadway construction (IV-16.3, 16.4).	8,000	CY		
2.7	<u>Clay Haulage</u> includes loading from stockpiles, hauling to the impoundment structure (approximately 5,000 ft), dumping onto stockpiles or placing, watering as needed (IV-7.4.2).	13,280	CY (compacted volume)		



V. FORM OF PROPOSAL

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENSION
2.8	<u>Barrier Construction</u> to be comprised of clay liner material in steeply sloped sections of the impoundment, including the upstream buttress tie-in to the impoundment liner, and includes exposing and cleaning existing barrier and, or liner, hauling, placing, watering, and compacting the clay (IV-7.5.1).	3,000	CY		
2.9	<u>Upstream Buttress</u> including loading, hauling Zone VI from either the quarry or the central ridge (IV-6.6, 8.0, 11.4), 16.4).	352,000	CY		
2.10	<u>Zone II Buttress Installation</u> to accompany the clay barrier of 2.9, including excavating, hauling, placing, watering, and compacting of the Zone II material (IV-6.2, 7.5.1, 11.1).	4,000	CY		
2.11	<u>Impoundment Slope Fill</u> including excavating, hauling, placing, and compacting of the Zone II material (IV-6.3, 9.0 & 11.1).	57,000	CY		
2.12	<u>Liner Installation</u> includes final foundation preparation, loading, hauling, placing, contouring, and compacting of liner clay; and excavating loading, hauling, and placing of moisture barrier material (IV-10.0; 11.6, 11.7)	23,725	SY		
2.13	<u>Game Fence Relocation</u> includes all labor and equipment for clearing fence line, installing gates and relocating game fence. Owner will supply materials (IV-17.0)	1,100	FT		

V. FORM OF PROPOSAL

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENSION
2.14	<u>Pump Station</u> includes loading, hauling, placing, and contouring Zone III buttress material to elevate the pump station (IV-18.0).	5,000	CY		
2.15	<u>Pipeline Support Shelf</u> includes loading, hauling, placing, and contouring of roadway surface material for continuous support of the reclaim pipe line (IV-19.0).	1,300	FT		
2.16	<u>East Bay Berm</u> includes loading, hauling, placing, grading, and shaping the east bay berm (IV-20.0).	13,500	CY		
2.17	<u>Levee Seepage Collection</u> day work charges for all excavating, loading, hauling, placing, grading, and shaping back filling of service roads, levee slopes, and structure excavations (IV-21.0).	N/A	N/A		
2.18	<u>Demobilization</u>	1	Lump Sum		

3.0 EQUIPMENT - CHANGED OR EXTRA WORK

The Bidder proposes to use the following equipment on the Work. Rental rates quoted are the rates the Bidder will charge the Owner for changed or extra work (if any) performed on a reimbursable basis by Work Authorization. All of the rates quoted include all of the operating and maintenance costs including labor based upon a 60-hour work week.

Description (incl. capacity and  
no. of units furnished)

Hourly Rental Rates

4.0 MATERIAL PURCHASES - CHANGED OR EXTRA WORK

The Bidder shall be reimbursed for material purchased by the written authority of the Engineer for work performed outside of the scope of the Contract at:  
Cost of Material plus \_\_\_\_\_ % plus Taxes & Freight.

\_\_\_\_\_  
Company or Signature

5.0 LABOR RATES - CHANGED OR EXTRA WORK

The Owner authorizes the use of the following labor rates only as expressly approved by the Engineer. All rates are based upon a 60-hour work week and include insurance, benefits, travel, per diem, taxes, small tools, consumables, overhead, and profit.

CLASSIFICATION

HOURLY RATE

---

Company or Signature

V. FORM OF PROPOSAL

6.0 EQUIPMENT TO BE USED

The Bidder shall list, on separate attachments, in the format below, for each part of the work being bid, the major equipment that he proposes to use to perform the Work.

<u>Equipment</u>	<u>HP</u>	<u>Year</u>	<u>Capacity</u>	<u>Condition</u>
------------------	-----------	-------------	-----------------	------------------

---

Company or Signature

7.0 SUBCONTRACTORS AND SUPPLIERS

- 7.1 The Bidder shall indicate below all of the Work intended to be subcontracted to others. Include any design work to be subcontracted and enclose a resume for each key supervisor.

Description

Subcontractor/Address

- 7.2 The Bidder shall indicate below all of the major suppliers of equipment and materials including shop fabricators.

Description

Supplier/Fabricator

---

Company or Signature

8.0 DESIGNATION OF REFERENCES

8.1 Tailing Dam or Related Contracts

<u>Company and Job Location</u>	<u>Name and Telephone No.</u>	<u>Yardage, Quality, and \$ Value</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

9.0 DESIGNATION OF REPRESENTATIVES

- 9.1 The Bidder designates the following as its principal representative who, on behalf of the Contractor, will have complete charge of the Contract.

Name: \_\_\_\_\_

Capacity: \_\_\_\_\_

- 9.2 The Bidder designates the following as its principal representative who, on behalf of the Contractor, will have complete charge of the Work performed at the Site.

<u>NAME</u>	<u>CAPACITY</u>
_____	_____
_____	_____

The Bidder shall submit with the Proposal a brief resume of experience for each of the above designees.



10.0 PERFORMANCE AND PAYMENT BOND

In the event of request for a bond:

Cost of Performance and Payment Bond

(to be paid as an additive amount to

the total Contract Price) . . . . . \$ \_\_\_\_\_.

Name of Surety (not agent): \_\_\_\_\_

Address: \_\_\_\_\_

Contract: \_\_\_\_\_ Phone No. \_\_\_\_\_

\_\_\_\_\_  
Company or Signature

11.0 EXCEPTIONS AND QUALIFICATIONS

Exceptions or qualifications taken by the Bidder to any of the documents furnished with this Invitation, or clarifications to this Proposal shall be stated below and, if none, the Bidder shall state "NONE." (If extensive, submit a detailed letter.)

\_\_\_\_\_  
Company or Signature

**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

Appendix A. INSPECTION AND QUALITY ASSURANCE SPECIFICATION

FOR

1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT

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A. INSPECTION AND QUALITY  
ASSURANCE SPECIFICATION  
ADDENDUM

1.0 INTRODUCTION

Barrick Mercur Gold Mines (the Owner) intends to raise the Main Buttress, the Levee Buttress, and the Impoundment Liner. The buttresses will rise fifteen (15) feet, from a containment elevation of 7315 to 7330. A portion of the liner will rise twenty (20) vertical feet, from 7320 to 7340. The lined area will cover approximately 5 acres (216,000 SF). This specification outlines the engineering, testing, and construction inspection program associated with the 1995 construction project on the tailing impoundment.

2.0 SCOPE OF WORK

The Owner will select an Independent Contractor to provide quality assurance services for this project. The Independent Contractor will designate a qualified Quality Assurance Engineer who is acceptable to Barrick's Project Engineer. The Quality Assurance Engineer will be responsible for implementing and overseeing the testing and inspection program; approving or disapproving any Work in accordance with the Specifications and Drawings and certifying that the construction was in compliance with the Specifications and Drawings.

3.0 WORK INCLUDED

The Work shall include, but not be limited to, the following items:

- 3.1 Testing - Perform all of the tests required to assure that all construction is completed according to the procedure and material specifications outlined in III. Contract Specifications and, IV. Construction Specifications. All tests will be conducted on site unless otherwise approved by the Engineer in writing.
- 3.2 Construction Observations - The Quality Assurance Engineer shall interpret the construction specifications, make observations and require tests as necessary to assess and accept the quality of the Work. Continuous observations and tests of the construction operations may be made by engineering technicians under the direction of the Quality Assurance Engineer.
- 3.3 Materials Selection and Use - The Quality Assurance Engineer shall advise the Construction Contractor as to the suitability of borrow material for use in the various zones of the main dam embankment, the dike, and the impoundment liner. It shall be the responsibility of the Quality Assurance Engineer to verify that all of the construction materials meet the specified requirements in order to assure a zoned embankment and an impervious impoundment liner as designed. Acceptance of the materials shall be after placement and compaction within the embankment section or impoundment liner.
- 3.4 Field Laboratory - The Quality Assurance Contractor will be responsible for securing, equipping, and manning a field laboratory on site. This laboratory will be outfitted with the equipment listed under Section 5.0 or with similar equipment of similar capability.
- 3.5 Field Technicians - The Quality Assurance Contractor will provide sufficient qualified laboratory and field technicians in sufficient numbers to ensure that all tests are

A. INSPECTION AND QUALITY  
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completed in a timely manner and in accordance with the procedures and with the frequencies outlined in Section 6.0 (Soils Testing).

- 3.6 Reporting - The Quality Assurance Contractor shall submit all the reports discussed in Section 7.0. All reports will contain the required detail and shall be submitted in a timely manner.
- 3.7 Site Visits - The Quality Assurance Engineer or a qualified field supervisor will visit the site weekly, at a minimum, to ensure that all sampling and testing procedures utilized by the Quality Assurance Contractor's field technicians are in accordance with the ASTM Standards and according to acceptable field practices. During these visits the Engineer or supervisor shall inspect the site, review all records, reports, and logs that are required to be maintained on site, discuss any problem areas with the Construction Contractor and the Project Engineer.

4.0 ITEMS OF WORK EXCLUDED

The following items are not included under the scope of this contract.

- 4.1 Land surveying, establishment of survey controls and surveying and volume calculations for payment are not part of this contract.
- 4.2 The Quality Assurance Contractor will not be responsible for submitting reports to state and regulatory agencies.

5.0 EQUIPMENT REQUIREMENTS

The Quality Assurance Contractor shall provide an on-site laboratory outfitted with equipment, instruments, and supplies so that all of the tests required in Section 6 with exception of the Triaxial Permeability tests can be performed on site. The laboratory shall be outfitted with equipment, instruments, and supplies similar to those detailed in the following section. Electric power generating equipment, if required, will be provided and maintained by the Construction Contractor.

5.1 Equipment Inventory of Portable Field Laboratory

<u>Quantity</u>	<u>Description</u>
1	8' x 30' Portable Lab
1	5.5 lb Proctor Hammer
1	10 lb Proctor Hammer
1	Hydraulic Sample Extruder
1	Proctor Mold, 6"
2	12" x 24" Hot Plates
1	Sample Shaker
1	Set 8" Sieves - 1 1/2, 1, 3/4, 1/2, 3/8, #4, #8 #10, #16, #30, #40, #50, #80, #100, #200
1	Sieve Vibrator, for Washing

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<u>Quantity</u>	<u>Description</u>
3	15" x 9" Bus Pans
2	250 ml Graduated Cylinders
1	Nuclear Densimeter
1	Atterberg Cups w/Accessories
1	Mettler PE-3600 Scale or Equivalent
1	Soil Splitter
5	8" x 12" Stainless Pans
10	6" x 6" Stainless Pans
4	5 Gal Poly Containers
1	Set Sandcone Equivalents
2	Beam Balances
1	Microwave Oven, 500 Watt
10	Canvas Bags
1	Eye Level
1	Calculator
10	Crucibles
2	2000 Watt Quartz Lamps, 4'
1	100' Tape
1	18" x 27" x 2" Screens
2	60 Minute Timers for Sample Shaker
1	5 lb Pick
2	Flat Nose Shovels

6.0 SOILS TESTING

6.1 General

The Quality Assurance Engineer shall direct the performance of all of the necessary testing to classify materials for use in the Work. The Quality Assurance Engineer shall set up a field laboratory at the Site to expedite the testing program. The field laboratory shall have the required facilities for the performance of in-place density, gradation, plasticity, and moisture tests to verify that the construction conforms to the Specifications.

6.2 Test Procedures

Except as noted herein, or when otherwise directed by the Engineer, all of the tests shall be performed in accordance with procedures set forth in Parts 14 and 19 of the latest edition of the ASTM Standards.

6.2.1 Test Frequencies

The testing of the construction materials shall be performed with sufficient frequency so that, in the judgment of each and all of the following: the Contractor, the Quality Assurance Engineer, and the Engineer, an adequate control of the construction is obtained.

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The following subsections list the minimum acceptable frequency of field and laboratory testing for the various construction materials to be used. In each case, the field tests relate to placed material, while the laboratory tests refer to borrow site material.

6.2.1.1 Zone II (Abutment Buttress)

Field Density, Moisture Content, and Size Grada- tion	-	1 test each per 2,500 cu yds, but not less than 1 test each per day of placement and Not less than 1 test each per lift.
Field Atterberg Limits	-	1 test per 5,000 cu yd.
Laboratory Com- paction, Size Gradation, and Atterberg Limits	-	1 test each per 5,000 cu yd, but not less than 1 test per each borrow area.

6.2.1.2

Clay Barrier

Field Density, Moisture Content Size Gradation and Atterberg Limits	-	1 test each per 2,000 cu yd, but not less than 1 test each per day of placement and not less than 1 test per lift.
Laboratory Com- paction, Size Gradation, and Atterberg Limits	-	1 test each per 5,000 cu yd, but not less than 1 test each per borrow area.

6.2.1.3 Zone VI (Upstream Buttress)

Field Density & Moisture Content	-	None
Field Size Gradation	-	None

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Laboratory Com- paction, Size Gradation, and Atterberg Limits	-	None
--	---	------

6.2.1.4 Impoundment Liner - Clay Layer

Field Density and Moisture Content	-	1 test each per 2,500 sq ft of each liner lift, but not less than 1 test each per day of placement.
--	---	---

Field Size Gradation and Atterberg Limits	-	1 test each per 20,000 sq ft of each liner lift, but not less than 1 test each per day of placement.
---	---	--

Permeability (triaxial test on Shelby tube sample.	-	1 test each per 20,000 sq ft of liner placed.
---	---	---

Laboratory Com- paction, Size Gradation, and Atterberg Limits	-	1 test each per 5,000 cu yd, but not less than 1 test each per borrow area.
--	---	--

6.2.1.5 Impoundment Liner - Moisture Barrier

Field Density & Moisture Content	-	None
-------------------------------------	---	------

Field Size Gradation	-	None
-------------------------	---	------

Laboratory Com- paction, Size Gradation, and Atterberg Limits	-	None
--	---	------



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6.2.1.6 Impoundment Liner - Erosion Cover

The QA Supervisor will verify geotextile sheet conforms to the specification of an Amoco 2006 or similar fabric. The QA Supervisor will note whether appropriate seaming and anchoring techniques are employed by the Owner. These items will be noted in the Observation Reports (Section 7.2).

6.2.2 Laboratory Moisture - Density Relationships

The compaction requirements for the various construction materials will be established according to the following laboratory moisture-density tests, or as otherwise directed by the Quality Assurance Engineer.

<u>Material</u>	<u>ASTM Test</u>
Zone II Abutment Buttress	D1557-78 (Modified Proctor)
Two-Foot Barrier	D698-78 (Standard Proctor)
Zone IV Upstream Buttress	None
Impoundment Liner	D698-78 (Standard proctor)

6.2.3 Field Density and Moisture Content

The field density and moisture content of the placed materials shall be determined in accordance with ASTM D1556-82 or ASTM D2922-81, or as otherwise directed by the Assurance Engineer.

6.2.4 Sieve Analysis and Plasticity Index Tests

Grain-size analyses and Atterberg Limits tests shall be performed in accordance with ASTM D421-78, D422-72, and D4318-84.

6.2.5 Triaxial Permeability

The triaxial permeability under constant head backpressure shall be conducted in accordance with ASTM D-5084-90.

The following protocol will be used to insure that the in-place liner has a maximum permeability of  $1 \times 10^{-7}$  cm/sec. If the laboratory triaxial permeability is greater than  $1 \times 10^{-7}$  cm/sec and the field compaction fails, remedial action must be taken. If the laboratory triaxial permeability falls between  $9.02 \times 10^{-8}$  and

A. INSPECTION AND QUALITY  
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$1 \times 10^{-7}$  cm/sec, two additional triaxial tests on specimens, taken from other panels within the control section, are to be conducted. If each of these two tests meet the  $9.02 \times 10^{-8}$  cm/sec criteria and the field compaction is approved, then the failed test is considered an outlier. If either of the two additional tests do not meet the  $9.02 \times 10^{-8}$  cm/sec criteria or the field compaction fails, then remedial action must be taken.

7.0 REPORTS

7.1 General

The Quality Assurance Contractor shall submit both observation reports and test result reports on a daily, weekly, and monthly basis. At the completion of the 1994 construction program, the Quality Assurance Contractor shall assemble a comprehensive Final Project Report. The contents and frequency of the required reports are detailed in the following sections.

7.2 Observation Reports

7.2.1 A Daily Log of the construction activities shall be maintained by the Quality Assurance Engineer at the site. This daily log will contain the following items:

- The day of the week and date
- The temperature and general weather conditions at the site
- A summary of the daily construction activities
- Details of the days testing program

A copy of the daily log will be available for inspection by the Owner, and the State Engineer.

7.2.2 A Weekly Summary of the construction and testing activities will be submitted to the Engineer on Tuesday of each week. The report shall summarize the testing and construction progress of the previous week. Accompanying the weekly summary shall be copies of all the week's daily log entries and copies of all test results completed during that week.

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7.3 Test Reports

7.3.1 Test Result Reports

Test result reports shall be submitted to the Contractor immediately upon completion of the tests. A copy of each test report shall be submitted to the Engineer along with the weekly summary (see Section 7.2.2). A copy of all test results will be maintained by the Quality Assurance Engineer at the site. The test reports shall follow the reporting requirements of the ASTM Standards and shall also include the following:

- Date issued
- Project title and number
- Date of testing and/or sampling
- Type of test
- Location of test
- Observations regarding compliance or noncompliance with plans and specifications

7.3.2 Test Block Location Map

The Quality Assurance Engineer shall prepare and maintain a Test Block Location Map that will serve as the basis for identifying the locations of specific tests conducted on various segments of the impoundment liner.

7.3.3 Monthly Data Tabulations

The monthly data tabulations shall be submitted to the Engineer by the Quality Assurance Engineer monthly. This report shall consist of a tabulation by sample number of the results of the various quality assurance and acceptance tests completed to-date. The tabulations shall be segregated by type of test (i.e., one tabulation for Proctors, one for Density, etc.). In addition to the tabulations, any additional data, information, and observation concerning the Quality Assurance Program should be submitted in this report.

A. INSPECTION AND QUALITY  
ASSURANCE SPECIFICATION  
ADDENDUM

7.3.4 Project Certification Report

At the completion of the 1994 Project, the Quality Assurance Engineer shall submit a letter certifying that the construction is in compliance with the Drawings and Specifications.

7.4 Final Project Report

Within 30 days after completion of the project, the Quality Assurance Engineer shall submit a Final Project Quality Assurance Report. This report shall be a bound and indexed collection of all of the daily and weekly observation reports. This report shall also include all of the individual test reports along with the monthly data tabulations, the Test Block Location Map, and the Project Certification Report. The Quality Assurance Contractor will be required to supply the Owner with four complete copies of this report.

**BARRICK MERCUR GOLD MINE  
MERCUR CANYON  
TOOELE COUNTY, UTAH**

**Appendix B. SURVEYING SPECIFICATION**

**FOR**

**1995 RESERVATION CANYON TAILING IMPOUNDMENT EXPANSION PROJECT**

## APPENDIX B. SURVEYING SPECIFICATION

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1.0 INTRODUCTION

Barrick Mercur Gold Mines, Inc. intends to raise the main buttress, the levee buttress, and the impoundment liner during 1994. The buttresses will rise fifteen (15) feet, from a containment elevation of 7315 to 7330. A portion of the liner will rise twenty (20) vertical feet, from 7320 to 7340. The lined area will cover approximately 5 acres (216,000 SF). This specification outlines the surveying and mapping requirements associated with this construction project.

2.0 SCOPE OF WORK

The Owner will select an independent contractor to provide the surveying and mapping services for this construction project. This Contractor shall be responsible for: conducting the preconstruction survey; providing all the necessary construction surveying; calculating construction quantities for payment; and preparing a set of as-built drawings after construction has been completed.

3.0 WORK INCLUDED

The Work shall include, but not be limited to, the following items:

3.1 Pre-construction Survey - The Contractor shall complete a preconstruction survey prior to June 15, 1995. The following are minimum requirements for the preconstruction survey:

3.1.1 Update and re-establish benchmarks in the project area.

3.1.2 Establish control points near the saddle dam, main dam, and northeast end of the impoundment.

3.1.3 Prepare initial cross-sections of the four (4) existing topsoil stockpiles and two (2) future topsoil locations.

3.1.4 Prepare initial cross-sections of the existing buttress on 50 foot stations.

3.1.5 Prepare initial cross-sections of the north and east abutment areas that will be covered with the clay barrier. These cross-sections should be prepared on 25 foot stations.

3.2 Construction Surveying - The Survey Contractor shall provide engineering surveying as required by the Construction Contractor and the Engineer. It is the Survey Contractor's responsibility to provide the Construction Contractor with timely and accurate survey control. The Survey Contractor will have a crew on site each and every day that construction activities are ongoing at the site, except when excused by the Construction Superintendent and the Engineer. Construction surveying shall include, but not be limited to, the following items:

3.2.1 Slope stake the upstream buttress during construction.

3.2.2 Provide lines and grades for buttress access ramps.

3.2.3 Provide cut and fill data for all construction activities within the impoundment area.

## APPENDIX B. SURVEYING SPECIFICATION

- 3.2.4 Provide lines and grades for temporary and final roadways.
- 3.2.5 Grade stake the areas to be covered with impoundment liners. The grade lines are to be approximately 50 feet apart.
- 3.2.6 Provide cartesian coordinates on a daily basis as requested by the Quality Assurance Engineer or his technicians.
- 3.2.7 Stake the bentonite mix areas as requested by the Construction Contractor.
- 3.2.8 Provide any and all Surveying and Mapping tasks as requested by the Engineer to complete the Project in good order.
- 3.3 Calculate Construction Quantities - The Survey Contractor shall be responsible for surveying the construction site monthly and calculating the quantities of materials placed during the previous month. These quantities shall be the basis for payment for the Construction Contractor.
  - 3.3.1 Monthly Surveys - The Surveying Contractor shall survey all areas in which work was accomplished during the previous month. This survey is to be completed by the fifth day of each month.
  - 3.3.2 Monthly Calculations - Using the results of the monthly survey, the Contractor shall calculate the quantities of materials placed during the previous month. Quantity calculations should be made for items segregated as they are in the "Form of Proposal" of the Construction Contract. A copy of the calculations will accompany the monthly quantity report.
  - 3.3.3 Cut and Fill Quantities - The Contractor shall complete the surveying, sketching, and calculating of volumes and quantities which must be excavated, then back filled, to provide a firm foundation for the impoundment liner. The excavations are normally filled immediately after excavation and will require surveying on an "as requested" basis.
- 3.4 "As Built" drawings - The Surveying Contractor will provide a set of 50-scale "as built" drawings and a 200-scale "as built" drawing at the completion of the project. These drawings will be submitted within 30 days of completion of the project. The drawings should be prepared on mylar plastic and should accurately reflect the configurations and topography of the impoundment, the dam, and roadways, as they existed at the end of the construction project.
- 3.5 Field Personnel - The Survey Contractor shall provide sufficient field personnel to complete the required daily work. The field crew will report to the work site at the beginning of every scheduled work day unless excused by the Construction Superintendent and the Engineer. The field crew will remain on-site until excused by the Superintendent and the Project Engineer.
- 3.6 Certification - The final report and the "as built" drawings will be certified and stamped by a registered Professional Engineer or by a Professional Land Surveyor. These drawings and reports serve as the documents for final payment and will be submitted to the State Engineer.



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### 4.0 WORK EXCLUDED

The Survey Contractor shall not be responsible for work on any other mine or construction projects.

### 5.0 EQUIPMENT

The Survey Contractor shall provide all of the items of equipment and supplies required to provide the engineering and surveying services outlined in this specification, including, but not limited by the following:

- 5.1 Instruments and Field Supplies - The Contractor will supply all surveying instruments, field equipment, calculators, and supplies, including stakes, that are required to complete all aspects of the field work in a timely and accurate manner.
- 5.2 Vehicles - The Survey Contractor is responsible for supplying the field crew with adequate transportation on the construction site, as well as transportation to and from the construction site.
- 5.3 Office Equipment and Supplies - The Survey Contractor is responsible for supplying all of the data reduction equipment such as calculators, computers, etc., that are required to reduce data, plot data, calculate quantities, or other treatment of raw survey data in the field or office. All drafting supplies, equipment, and materials will be supplied by the Survey Contractor.

### 6.0 REPORTS

The Surveying Contractor shall be responsible for submitting monthly reports and a Final Project Report.

- 6.1 Monthly Report - This report will be submitted to the Construction Superintendent and to the Engineer on the 10th of each month. This report should contain a brief narrative describing the previous month's construction and surveying activities along with a summary of the material quantities calculated for the previous month.

The Monthly Report is to include copies of the cross-sections used in calculating the quantities. Two representative sections will be sufficient for each of the Main Dam and Saddle Dam. Cross-sections are to be submitted for those areas where subexcavations or filling occurred. In actively worked abutment areas, the submitted cross section frequency will be on no more than 50-foot centers.

- 6.2 Final Report - A Final Project Report shall be submitted at the Completion of the project. This report shall contain a summary chart itemizing total quantities as segregated on the Form of Proposal in the Construction Contract. Included should be copies of all of the cross-sections used to calculate volumes and copies of the final volume and area calculations.